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Random Reflections on a Mature Economy

HOWARD R. SMITH

WASHINGTON, D. C.

In the years following 1929 there appeared a flood of literature debating whether or not America has reached a point in development that can be described as 'economic maturity'—the meaning of maturity in this sense being that traditional motivations can no longer be entrusted to carry out the capital expansion necessary to produce full employment. Since the attention of most thinking persons became focused upon world affairs, and since the prosecution of a world war brought about a condition of full employment, the stream of literature on this subject has abated. Today, with the approach of demobilization and the cessation of unlimited government purchases of the output of industry, attention is beginning to be again directed toward this problem. In fact, to a significant extent the presidential campaign of last year consisted of accusations of and denials of belief in economic maturity.

The argument that capitalism has reached maturity is basically Keynesian in inspiration and approach. It is contended that adjustments in a money society are such that real investment and real savings must by definition be equal. If monetary savings and monetary investment diverge national income acts as a balance wheel to equate the two in real terms. If monetary savings is greater than monetary investment national income falls. If monetary investment is greater than monetary savings national income rises.

To this point, as far as the writer is aware, there is basic agreement among economists today, albeit there is still considerable discussion in academic circles about definitions of real and monetary

savings and investment. However, the economic maturity viewpoint goes further, saying that as capital creation proceeds per capita income increases, and the percentage of money income set aside as savings increases. Thus the absolute amount of savings rises very rapidly as an increasing percentage of an increasing amount. Conversely the greater the development in capital equipment in the nation the fewer are investment opportunities on the basis of free-enterprise motivations. Thus a progressively greater volume of potential investment is met by a progressively lesser opportunity to invest. National income must, then, remain relatively lower under the guidance of free enterprise than would otherwise be the case in order to equate real savings and real investment. Average employment must therefore be considerably less than full employment.

Those persons who disagree with the mature economy viewpoint counter the above simplified arguments with another set. They maintain that the American genius for invention is always opening up more opportunities for investment than can be exploited with new savings. They grant the theoretical possibility of temporary stagnation, and agree that when it comes to pass the results are as outlined. But they point to the automobile industry, the radio industry, the aircraft industry, and the host of industrial possibilities developed by war-accentuated technology in the last few years—electronics, plastics, etc.—as concrete evidence that their position is not only theoretically grounded in but actually substantiated by everyday facts.

It is not the purpose of this article to pass judgment upon these two viewpoints. As in the case of most controversies this discussion seems in part to be attempts by both sides to cling to an "either-or" position in order to force minor concessions from the opposition. In other words the real differences between the two factions are probably much smaller than the literature would indicate.

The purpose of the writer is to urge that a consistently neglected factor may have an important part to play in ultimately resolving this particular issue. That factor is the subjective one of attitude. It is, in short, not sufficient to generalize as to either a pro-



gressively lesser opportunity to invest or a high level of inventive activity without emphasizing that the attitude of investors toward investment opportunities may itself determine whether they are increasing or diminishing. Thus the existence or non-existence of an opportunity to invest may not be in essence an objective fact as much as it is a mental appraisal of an entire pattern of miscellaneous conditions.

The present analysis of economic maturity as a manifestation of attitude is predicated upon two premises, both borrowed from the field of psychology. The first of these premises is that "man is always a feeling and emotive being. Only secondarily is he an intellectual, rational, and deliberate individual."<sup>1</sup> The second is that human reactions are not oriented to the totality of the environment but only to certain aspects of it. In the words of Kimball Young: "Yet, habits are not confined alone to overt bodily movements . . . There are habits of attention . . . Then, too, there are more or less generalized habitual responses which we call traits and attitudes . . ."<sup>2</sup>

The significance of these two propositions for the problem at hand is twofold. First, they lend authority to the statement that the subjective factor of attitude probably plays a much more important role in economic life than is frequently supposed. Second, they demonstrate that to the extent that two contradictory appraisals of the current state of capitalism do exist, an explanation of the contradiction must in large part revolve around a differential focus of attention by the two groups involved. In short, one group "attends to" one set of environmental facts and develops one pattern of attitudes; the other group "attends to" a different set of environmental facts and develops a different pattern of attitudes.

The all-pervasiveness of these factors in society, once opposing attitudes have arisen, indicates that the human personality is integrated in terms of its attitudes and behavior patterns. Thus the mind and the emotions mutually reinforce one another in

<sup>1</sup> Young, Kimball, *Personality and Problems of Adjustment*, F. S. Crofts & Co., New York, 1940, 24.

<sup>2</sup> *Ibid.*, 77.

perpetuating both the attitudes and the behavior patterns. Through the factor of attention—itsself an important function of the emotions—the material with which the mind works tends to be limited to certain relationships. In turn the emotions furnish the basic motivation for the operation of the mind. As a consequence the mental and physical activity of the individual—and through the individual that of the group as well—becomes to an important extent predetermined in terms of only a portion of the environment.

On the basis of this brief digression into the field of psychology the preliminary observation will be made that when two intelligent groups of people cannot agree as to the degree of maturity of free enterprise in America the underlying problem may well be not simply to uncover the facts insofar as economic environment is concerned, but rather to isolate the specific facts contributing to each of two focii of attention, each one of which is supportive of a mutually exclusive attitude toward the phenomenon in question. A secondary problem—secondary only for purposes of this article—would then be to attempt an understanding of the source of the attitude extremes which are intimately associated with their respective focii of attention.

The specific focus of attention accompanying the attitude of denial of the thesis of economic maturity is readily apparent. Capitalism has, after all, been outstandingly successful in bringing about the vast accumulations of capital that have made for higher living standards in America. The reaper, the railroad, the internal-combustion engine, the printing press, electricity—one becomes lost even to begin to list the more spectacular accomplishments of technology that have been a part of the triumph of free enterprise capitalism. To concentrate upon the achievement of capitalism is to believe in its continued efficacy; to focus attention upon the mechanical genius of America is to trust in its ability to weather any crisis.

The source of the attitude that produces this particular focus of attention is also readily apparent. Belief in freedom, belief in the individual, belief in material well being—in short, virtually the entire history of America—contributes to this focus. However, for the reason that both this attitude and its resultant focus are

so evident, they will be simply assumed in this presentation. Thus the remainder of this article will be devoted to the opposite focus of attention and its corresponding attitude. Preliminary answers will be sought to two questions. The first of these is: What factors in American economic society serve as elements in the focus of attention reinforcing a faith in the theory of economic maturity? The question is: What factors in the development of capitalism might have produced such an attitude? First and principal attention will be given to the former. Only a brief statement with reference to the more complex, second problem will be offered.

Before enumerating economic factors that can be considered supportive of the so-called pessimistic outlook several introductory observations are necessary. In the first place, the factors enumerated below—eight in all—are non-coordinate in one significant respect. Several of them—notably the first two—are general factors that would be more readily apparent to the professional economist than to the business man whose sphere of activity is limited to his own industry. Others of the factors mentioned are of importance to the professional economist only because of their effect upon the behavior of the businessman—singly and collectively. Thus if developing capitalism operates to affect unfavorably the confidence of businessmen in the business situation, the professional economist is entitled to put this fact of failing confidence in the same category as other more abstract economic facts for present purposes. For this reason the abstract and the more concrete contributing factors have not been separated in the analysis.

In the second place, in order to demonstrate a basis for the economic maturity thesis it is not enough to simply offer in evidence factors contributing to a less than complete confidence in the economic mechanism. It must also be shown that these factors are a function of the development of the system or that they have a tendency to grow in influence as capitalism becomes older. Note that it is not necessary to demonstrate whether or not there are other and more powerful forces associated with developing capitalism which might, objectively, more than counter-

act the items included in the enumeration. This is true because the purpose of this article is to trace out the background for an attitude rather than to definitively solve an objective problem.

Finally, the pattern of this presentation is not such as to bring out all of the causal relationships involved. The use of the term 'random reflections' in the title was to be the reader's warning that every factor is not neatly subsumed under its proper major heading. The reasons for this arrangement—or lack of arrangement—are twofold. In the first place, factors such as those included for present purposes are primarily significant for their relationship to an attitude rather than for their relationship to each other. Thus the picture to be suggested is more in the nature of a 'center' with radii emanating therefrom than in the nature of a 'principle of causation' followed by detailed constituent parts. In the second place, this article is only a preliminary step in outlining this particular approach. Consequently it would be over-ambitious to presume to suggest a 'final' causation pattern.

A first important economic factor that would serve as an element in the focus of attention contributing to a belief in maturity is a tendency for capitalistic automaticity as personified by Say's Law to disappear. One of the principal ways by which this tendency is brought about is through the separation of the saving function in the economy from the investment function. Following the Keynesian thesis a stable national income depends upon every dollar of today's income—whether saved or spent on consumption goods—generating income for tomorrow through employment of resources in production. In an earlier period in the history of capitalism this condition was automatically fulfilled. A dollar 'set aside' for spending was by definition spent. Its spending created a *prima facie* probability that the same commodity (or equivalent) would be purchased again, thus providing a motive for employment of resources in production. For the most part this part of the condition for stable income is still fulfilled today.

The history of the dollar 'set aside' for investment (saved) is quite different, however. In that earlier day a dollar so set aside was as automatically returned to production as the dollar spent for food. This was true because the 'saver' and the 'investor'



were typically the same person, and, what is more important, because the motive for saving was primarily the desire to invest. Today investment is typically carried out by persons who do not themselves save the funds invested. In addition, saving is quite typically motivated by a desire for economic security rather than by a concrete desire for investment. Thus the automatic return of income to production is not the rule with income saved. And this fact, if magnified somewhat, could easily support an attitude of hesitant endorsement of traditional capitalism.

This particular economic factor can be stated in even more extreme terms. To the extent that saving becomes an outlet for insecurity rather than a means to employ resources the saving motive tends to run counter to the investment motive, for investment proceeds from confidence. Other things being equal savings would be most readily available when least wanted by investors. Fortunately, however, other things are not equal, for any length of time at least. A tendency in this direction is soon measurably checked by the fact that the failure of investment to equal savings results in a decline in national income. The result is that necessary consumption absorbs a higher percentage of consumer income, while correspondingly less income is available for satisfaction of the desire for security. It seems undeniable, however, that the initial tendency does contribute to the downswing of the cycle in its incipient stages. Since in a highly developed capitalistic society a condition of disequilibrium, operating through a vast maze of indirect effects, is less readily checked, the initial tendency alone is significant enough to warrant attention here.

In summary, spontaneous equilibrium is most readily achieved where the receipt of a dollar as income creates a vacuum to be immediately filled by the creation of a dollar's worth of further production. This condition is readily fulfilled when the motive for receiving income is returning it to production; when, in other words, all spending is 'necessary' spending, and when saving has investment for its principal motivation. The young and poor capitalistic community most nearly represents this ideal; the older and richer community is farthest from the ideal. Note that the fact of richness itself is not the important consideration. If



a rich economy could be operated without the possibility of an attitude of insecurity creeping in an indirect equilibrium could serve equally as well as spontaneous equilibrium. But richness does provide the background which, once such an attitude is present, can not only ignite the spark but also can materially augment the resultant decline in national income. The balance for the wealthy community apparently becomes more precarious.

There are several evidences that the development here under discussion is necessarily accentuated as capitalism grows older. In the first place the content of the living standards of the population tends to contribute to this result. An inevitable accompaniment of an increasing standard of living has been the spending of a lesser proportion of income on necessities and the spending of a greater proportion on luxuries. Stated differently, the richer a nation becomes the higher the percentage of its resources that will be devoted to items that are 'postponable' to prospective buyers. If any considerable wave of insecurity passes over the population purchase of postponables will consequently decline, causing unemployment of certain of the resources engaged in their production. This analysis applies equally to inventory stocks throughout the entire distribution process within the economy. This possibility of threat to equilibrium tends to grow greater as national income increases.

In the second place, with national income at all widely distributed it would have been impossible for the accumulations of capital represented by huge corporations to have developed through direct investment by savers themselves. The interjection into the system of intermediaries in the form of banks, insurance companies, investment trusts and the like, the utilization of the stock exchange device, and the separation of ownership from control were all natural by-paths along the road to the industrial structure we know today. These by-paths, too, increase in significance as the system grows, contributing further to lags and jerks in the mechanism once a circuit is broken.

In conclusion, it is significant to note that a wealthy economy operating at low depression levels closely resembles a poor economy in terms of automaticity. In fact, that volume of production which,

if evenly distributed, would provide only necessities for everyone is at one and the same time the level of activity with the highest degree of automaticity and the level below which income can not fall. Once at this (approximate) level the population can resort to the self-sufficient household or a near approach thereto, or it will—if income is badly distributed, as will normally be the case—resort to the theft or revolution method of redistribution. Fortunately depressions in this country have not in the past reached such a low level for any substantial proportion of the population. But, once income has begun to fall in a wealthy state, the stopping point will be reached only when the wave of pessimism has spent itself or near-automatic equilibrium is established, both possibilities, of course, being intimately associated.

A second economic development that would lend credence to a theory of economic maturity has to do with the relationship between inventions and the process of capital formation. The important fact to bear in mind throughout this part of the discussion is that inventions in and of themselves do not guarantee capital formation or even, necessarily, a higher standard of living. All that an invention can do is to make technically possible something not previously possible. Whether or not capital formation or higher living standards will ensue is dependent upon a variety of other considerations to be discussed in some detail below.

Roughly speaking an invention may produce profits for its owner in one or several of four distinct ways. First, an invention may make possible a greater output of standard goods with the same input. The reaper is an example of an invention falling primarily in this category. Second, an invention may make available a new product that will serve as a substitute for a standard product. A pure example of this type of invention probably does not exist. However, the development of nylon for use in hosiery is an innovation having much of this second characteristic, as well as some of the first. Third, an invention may result in a product that will attract income previously spent on something quite different. Although it would be extremely difficult to actually pin down such a result, a certain amount of fickleness is known to exist in the buying habits of consumers, and such an underlying tendency

is doubtless augmented by many inventions. Fourth, an invention may make possible a quality of consumption previously impossible, although only with the expenditure of a greater output on the part of both consumers and producers. Improvements in radio in the last few years have to a considerable extent taken this form.

Now let us consider in turn the principal economic effects of each of these invention types to determine the degree to which profit to the owner is or is not wholly consistent with net capital formation. Inventions in category one are the basic invention type. Thinking for a moment of a society without any development whatever it is obvious that the first inventions must be almost entirely of this type. Where there is nothing to begin with the creation of something can create no 'substitute' effect and is an infinite (net) increase. However, when inventions (or capital) already exist it is difficult to avoid overlapping to some extent, and the more capital that exists the more difficult it becomes to avoid overlapping. The invention of the reaper in the middle 1800's destroyed some large part of the sickle industry, but the net result was a tremendous capital formation. The perfection of the combine 75 years later, although quite revolutionary in itself, probably resulted in almost no net capital formation.

The principle we have drawn this far is that the more developed an economic community becomes the less do inventions take on the characteristics of category one. It must follow, therefore, that as capitalism advances inventions take on more and more the characteristics of categories two, three, and four. Thus a fuller analysis for these categories is even more important, perhaps, than for category one. The economic result of an invention of category two (an invention to make possible a substitute for another product) is as follows. To some extent the capital equipment and industrial organization used in the manufacture of the old product is converted to the manufacture of the new product. To some extent also old capital will be dissipated by the formation of new capital. Finally the invention may have some characteristics of category one. To this latter extent net new capital may be forthcoming. But, what is significant for present purposes, to the extent of virtually the entire amount of substitution the

net result is a change in capital equipment and not the creation of net new capital.

With respect to the product itself an invention falling in category two may have one of several results. If it is a non-durable product new purchases will simply be diverted to the new product. If it is a durable product and none of the old units are scrapped before they otherwise would have been the result is the same. To whatever extent units are scrapped before they otherwise would have been the propensity to consume is increased temporarily for that particular product in the sense that a greater absolute amount will be spent on the product during the period of 'reconversion' than would otherwise have been the case. If this increased propensity is offset by temporary decreases in consumption elsewhere in the economy the result will be the same as for an invention in category three. If there is no offset in consumption elsewhere the result will be the same as for an invention of category four. Each of these latter two categories will now be taken up in turn.

The direct capital effect of an invention of category three are very similar to the effects of a category two invention. The principal difference is that there will normally be but little opportunity for converting the old capital into the new. Thus, to virtually the entire extent of the substitution, the old capital will simply be dissipated. In fact, in an economy of overhead costs such as we have in America, a relatively small amount of substitution may mean the difference between profit and loss to an industry in an amount much larger than the amount of the substitution itself.

The effects on capital formation of an invention of category four are particularly important and interesting. Here the economy is achieving not more output with the same input, but more output with more input, something quite different. Note that this type of invention is most likely to be a factor to be reckoned with in a wealthy community rather than in a poor one, for in the latter the population must be content with the output from the present input as there is normally nothing more to be put in.

A good example of this type of invention is the airplane in its presently developed form. One of the biggest subjects for research



throughout the entire aviation industry is the possibility of flying vine-ripened perishable fruits and vegetables to market to replace the artificially ripened product. Since it will—at the moment—cost more to fly produce to market than to carry it there by traditional media of transport we have an excellent example of better quality product furnished to the consumer at a higher price.<sup>3</sup>

The question here at issue is how high a standard of living can people be sold. To what extent, in other words, can category four inventions increase the propensity to consume at the expense of the propensity to save. For if the sale of a higher priced-better quality product results only in offsetting reductions in consumer expenditures elsewhere we return immediately to the results indicated for inventions of categories two and three. But if there are not offsetting reductions in expenditures elsewhere the result, although temporarily a net increase in capital invested, is ultimately a net increase in the propensity to consume and consequently a lesser amount of savings to be invested.

One last comment with reference to inventions of category four seems warranted. It will be suggested that the results outlined for this type of invention are favorable, **provided there are not offsetting reductions in consumer expenditures elsewhere.** That is true, but the qualification is vital. It means in effect that consumption of a higher quality—thus to be considered in the luxury category—must press in upon the desire for security within the scale of values of the population. A higher propensity to consume is one of the things Lord Keynes stresses most among methods of overcoming the capitalistic dilemma. Government spending (even though on durable goods) is the principal method of bringing about this augmentation of spontaneity (automaticity) in the economy. The question then becomes, first, can this be done best through invention, government spending, or in some other way; and second, if one grants that it is necessary to increase the

<sup>3</sup> This is by no means an isolated example. The average price of refrigerators sold was probably increasing before the war. The same thing could probably be said about automobiles, radios, phonographs, vacuum sweepers, etc. The answer is simply a better product but available only at an increased cost.



propensity to consume, is he not implicitly granting one of the major premises of the maturity theorists.

In the light of this discussion of inventions it might be profitable to concretely consider some of the new industries that have been heralded as proof that we do not have a mature economy. Take, for example, the capital created following the invention of the internal-combustion engine. The unamortized capital expenditure in motor transportation in America is estimated at roughly \$25,000,000,000.00. It would certainly not be said that transportation facilities and general economic well-being are not greatly improved through the growth of motor transportation. Yet if there were not motor transportation the railroad industry today would probably be worth book value, or \$18,000,000,000.00. Actually the railroad industry is worth little if any more than \$12,000,000,000.00. Thus to the extent of \$6,000,000,000.00 the development of motor transportation has helped bring about a transfer of capital (transfer to the government it might be added) rather than the creation of net new capital.

Much the same sort of thing could be said—prospectively rather than retrospectively—of the aviation industry. To the extent that this industry absorbs large amounts of capital as a peace time proposition it will to an important extent be substitute capital rather than net new capital.

Finally, we are proud of our war induced technological development. One industry developed during this period is that of synthetic textiles. Yet already a major just-under-the-surface problem of government is what to do about the cotton-producing area and personnel in the South.

All of this is not to be interpreted as opposition to inventions. But it is easy to exaggerate the capital creation effect of new inventions and new industries. And, it seems undeniably true that the greater the development in the capital structure of a country the greater will be the relative substitution effect of new inventions and the smaller will be the relative net addition to capital resulting therefrom. Thus if one is inclined to be pessimistic about the future of free enterprise in America, this particular fact provides an excellent reason for continuing to be so.

We are now ready to consider a third element in the focus of attention that will help support an attitude of pessimism concerning the future of private enterprise capitalism. One of the principal characteristics of a young economy is growth. The particular aspects of growth that will be of importance here are population growth and an increasing per capita production. While we still have today an increasing population, the increase is clearly at a decreasing rate, and it is predicted that in the not-too-distant future population will begin to actually decline. Prior to the war, per capita production was still increasing although this factor too seems to be increasing at a decreasing rate. The issue is not as clear cut in the case of per capita production as in the case of population due to the distortion caused by the depression years and the war period.

What are the economic conditions responsible for an increasing per capita output? First, increasing specialization may be responsible. But increasing specialization is partly a function of increasing population. We are now receiving less impetus from this source, and can anticipate still less. Increasing specialization is also partly a function of training, but as the labor supply stabilizes we can anticipate a lesser relative augmentation to working skills. Second, and probably most important, an increasing per capita output has in the past been due to an increasing amount of capital per worker. If savings continue throughout the economy, capital will tend to increase in absolute amount. But the greater the capital accumulation the smaller the relative increase from a given amount of new capital. In addition, if the economy has a growing difficulty in investing funds saved a still further lag in relative accumulation will result. Thus a number of signs—this is not meant to be an exhaustive list—point to a declining rate of increase in per capita output to match the declining rate of population increase.

The significance of these facts is this. In an economy in which population is doubling every twenty-five years and per capita income is doubling in about the same period of time it is extremely difficult to make a serious error in entrepreneurial judgment. Mere growth will serve to justify very quickly expansion that in

an economy growing less rapidly would prove fatal. It is generally agreed that thousands of miles of railroad were built before there existed anything like full economic justification. Yet within a comparatively short space of time more track in the same area was a necessity.

Today, with normal growth reduced to but a fraction of earlier growth, it is so much easier to make a serious error in entrepreneurial judgment that enterprisers are quite understandably more cautious in their outlook. With the limits of tolerance narrowing it is small wonder that a certain amount of the blustering confidence of former days—a confidence that might easily mean the difference between the beginning of a slump and the continuance of good business conditions at a crucial point—is missing from the industrial scene.

A fourth economic development that might serve to perpetuate a tendency to pessimism is the relative increase in the proportion that overhead costs bear to total costs. Such an increase has characterized the growth of capitalism. Overhead as a cost is a function of increasing specialization and refers primarily, although not wholly, to fixed and specialized capital. Thus as capital is accumulated more rapidly than the labor force increases the effect of the factor capital upon entrepreneurial adjustment correspondingly increases.

The significance of overhead in the present connection stems from the fact that it brings about an inelasticity in business organization that is not otherwise present. It is said, for example, that it takes on the average \$5,000.00 in capital invested to put one laborer to work in a modern, well-equipped factory. Before making commitments of such magnitude as this it is vital that an entrepreneur have a fair degree of assurance of a quantity of output somewhat greater than the break-even point, and also some assurance that demand will continue about as long as the basic capital contract,<sup>4</sup> roughly determined as some function of

<sup>4</sup> Along with the separation of ownership and control has come the inevitable concomitant of contracting for the capital of others to a greater and greater extent in comparison with the use of personal capital. It is at once evident to what a degree this fact itself acts to produce lesser adjustment ease.

capital goods life. Without some such assurance an entrepreneur might well—and probably does—hesitate materially.

Coupled with an increase in the relative significance of overhead is a corollary development. As specialization and thus inelasticity in industry have increased the size of businesses have increased—in part as a means of extending control in order to combat inelasticity. Thus, again, there is available still further evidence that a given decision is today of greater relative moment to success or failure than a similar decision one-hundred years ago—of greater moment in that (1) the limits of tolerance are much narrower; in that (2) the period of time for which the decision must be made is longer; and in that (3) more is at stake.

There are, of course, important compensations here as at each of the points above mentioned. The common and preferred stock devices, by means of which residual income receivers are recognized before the law, have done a great deal to mitigate the full effects of this development. Also a progressive liberalization of bankruptcy law has materially whittled down the penalty attaching to losing other peoples' money. (This is a simple statement of fact; not a value judgment.) But leverage is not unlimited, and bankruptcy is still carefully avoided in the normal situation. The important point to be emphasized is that the growing weight attaching to the business decision can be used as one focal point for an attitude of pessimism, and that this growing weight is in part a function of age in the economic system.

A fifth economic development that needs a share of attention is the fact that certain types of competition tend to increase as the economy grows older. When thus casually stated this observation seems absurd, for we now have the largest and most active anti-trust group in history striving to keep to a minimum national and international cartels. It is obviously true that cartellisation is an extremely vital movement in today's economy. But the absence of cartels is not synonymous with the presence of competition. Thurman Arnold himself has suggested the probability that we have in some respects a greater amount of competition today than one hundred years ago for the following excellent reason. In our early history, and in the days of very poor transportation, a



community would normally have only one place to buy any given 'store-bought' commodity desired. It was extremely impractical—in most cases impossible—to use another community as a substitute. The far-outlying community of today with its single store (maybe one of several kinds) was then a typical case, with the important difference that today the majority of persons even in such a community have easily available to them some larger center of population as a substitute if desired.

But there are other reasons for the increasing weight of competition. As capitalism advances, more and more of the individual's life must be lived within that nexus, in addition to the fact that a larger percentage of the population is continually thrown into that particular world (as the percentage of urban dwellers increases relative to non-urban etc.) Then, too, the weight of this fact must be even greater when there is no 'frontier' available as a not-undesirable alternative. But it is an important fact that the frontier is no longer available as the powerful force it once was, and that the mechanism of competitive capitalism has continued to sweep more and more of us into its confining web. As Frank Knight has so ably expressed it the situation is such that even those who do not enjoy the game are still compelled to play.<sup>5</sup>

It will be suggested in refutation of this thesis that the principal 'so-called' failure of competition today is not at the retail or wholesale level as much as in manufacturing. But even here there is clearly another side. For there is other competition than that between the production of identical products. There is also competition between substitute products and between products at the periphery of value scales that merely compete for the same dollars. The entire quite recent development of product differentiation has for its primary goal that of demonstrating non-substitutability. However, this development probably also has as an important result that of actually narrowing the competitive margin between similar products through an extension of knowledge of the market. Thus while the result of differentiation may on the one hand be said to tip the demand schedule from the horizontal, it may equally be said that it at least is a more competitive

<sup>5</sup> Knight, Frank H., "Ethics of Competition," *Quarterly Journal of Economics*, Vol. XXXVII, 611ff., August, 1923.



demand than if tipped to monopoly proportions. Stated more broadly the intensive development of advertising results, among other things, in the creation of so extensive a communication (even if much information given is partially false) that manufacturers must be continually alert to keep their own product 'in the groove' as far as the consuming public is concerned.

Another important aspect of increasing competition exists in the case of patents. It is rather inevitable that advancing capitalism would bring with it greater and greater continuity in technology. From an inventor's point of view patent laws are for the express purpose of promoting discontinuity in technology. If the patent laws before the courts had been consistently interpreted in this way a serious violation of traditional individualism would have occurred. Actually patent law has been so interpreted as to promote continuity even while permitting a certain amount of discontinuity. Thus indirect competition has been greatly increased.

From the above comments pointing toward an increase in competition it is not to be presumed that the writer is opposed to anti-trust prosecution or other attempts to increase competition. And as to where the industrial optimum lies between the tendency for competition to increase and the tendency for it to decrease is a problem beyond the scope of this presentation. The only point at issue again is that within these trends there lie grounds for support of an attitude of pessimism.

A sixth factor contributing additional support, and one that is frequently placed much nearer to the top of such a list as this, is the factor of the evolution of government control of industry. The force behind free enterprise is the desire for profit. When the government steps in from behind to restrain certain activity it can only be presumed that the adjustment of business to the restraint is less profitable than the adjustment before the restraint. If the activity restrained were not more profitable it is reasonably safe to assume that it would not have been entered into in the first place. The extensiveness with which the government now enters into business decisions could be a very severe deterring influence.

The Constitution, it is true, protects the business man from arbitrary and retroactive control, at least in theory. But any control that is disruptive of profits can not but be considered arbitrary by anyone oriented basically to the profit motive. Until, in other words, business generally attaches itself in part to new motives it is apt to act frenziedly when the profit motive runs into interference. As for retroactivity it is a well-established fact in constitutional interpretation that, where dollars are involved, non-retroactivity and non-confiscation are virtually synonymous. But in the general exercise of the police power (as distinct from utility regulation) confiscation cannot be raised as a plea. And in the last analysis when the government finds a wrong which must be righted it must cut across the lines of past decisions in the righting process. This cutting across lines of past decisions is, in essence, retroactivity. Thus on every count the business man no doubt considers himself hemmed in by controls, and to an ever-greater extent.

One of the principal lines that government 'interference' has taken in the past has been the development of a pattern of labor protection. It is wholly beside the point here that business in general may have brought this upon itself by a cavalier treatment of laborers, or that paternalism may be in danger of being carried too far. The important fact is that an entrepreneur is much less free than formerly to fire an employee, and much less free in the face of minimum wage and maximum hour laws to contract with his employees. These are only two of the many manifestations of the labor legislation of the last two decades. The net result of all of them taken together is to substantially increase the inflexibility of business in troubled times, thus providing material support for an attitude having the same consequences at least as a belief in the theory of the mature economy.

It might be parenthetically stated here that the above factor was given a place quite far down on this list for a very special reason. It is frequently urged that the government should take steps to encourage risk-taking. The writer is in full agreement up to a point, preferring, however, to state the case as *against unduly discouraging risk-taking*. The reason for the preference

is this. The argument for encouragement is frequently placed in such a context that it appears that the principal discouragement is government interference. Actually the entrance of government onto the business scene was not at all for the purpose of discouraging enterprise. Rather it was to correct certain very specific abuses of enterprise. Thus to lift controls that are directly 'necessary' on other grounds in order to remedy indirectly a result possibly caused only in small part by the controls themselves is a very dubious procedure. It was to emphasize the really small part government control probably plays in the discouragement of investment that this factor was listed near the end of this enumeration.

Whether the expansion of the part of government in the operation of industry is a necessary concomitant of the growth of capitalism is not demonstrable beyond a shadow of a doubt. It is a fact, however, that this expansion has taken place in all capitalistic nations and there is in sight no immediate reversal of the trend. In this country particularly the two have been clearly parallel. From the standpoint of the limited position necessary for purposes of this article it seems fair to consider government control and government laying down of norms spurious to the system as ideally interpreted a concomitant of business growth. Specialization of function and loss of personal contact throughout the community would, from a sociological point of view at least, lend considerable credence to this interpretation.

The seventh factor that will be sketched here concerns the business cycle itself—specifically the extended depression following 1929. Professional economists tend to agree that one important reason for the viciousness of that depression—in terms of both severity and length—is the fact that the trough of the secular cycle coincided with the cyclical dip itself. But, whatever the explanation, the vital fact remains that the depression *did* happen and it *was* severe. That fact, coupled with the fact that as long as people are human, history will leave scars, is cause enough for sober reflection on the part of much of the population. That people today are more afraid for the future because of their experience in the thirties is stating the case mildly. Already

there is a strong undercurrent of dread of the post-war recession on the part of more people than would overtly admit it. And, although scarcely needing emphasis, another experience comparable to that of the thirties will produce an additional despondency.

Closely allied to the cycle itself is the national debt. Once most widely discussed in connection with pump-priming, the national debt now far exceeds anything that would have been reasonably dictated for pump-priming purposes. But the very magnitude of the war-induced debt will tend to augment considerably its significance when it is once again discussed in connection with government activity in time of depression.

Economists are not all agreed as to the real consequences of an internally-held debt. Thus it is not surprising if the business world generally tends to magnify such a debt out of its proper perspective. But this much is certain. The minimum consequence of a large debt is the funnelling through the hands of government a large amount of annual national income for debt service alone, and a correspondingly larger volume depending upon the extent to which repayment is undertaken. Money flowing through the hands of government is a potential tool in many directions, some of them large unknowns. As a result, whatever the maximum consequences of national debt may be, and however great or small is the objective probability of a depression similar to that following 1929, both of these facts add up to an additional factor lending support to a feeling of apprehension.

It would, of course, be question-begging to claim that this factor is a function of advancing capitalism. Suffice it to say here, therefore, that the unprecedented severity of the 1929 depression makes it very easy for the average person to *believe* that depressions are inevitable and due to become increasingly severe. It is this belief, attached specifically to the period of the thirties, that makes the depression a factor in the focus of attention that lends credence to a disposition to accept the mature economy viewpoint.

One final factor will be briefly touched upon. Isolationism is traditional American policy. This traditional policy was pro-



foundly but only temporarily shaken by the last war. As a result of the present war we have again been profoundly shaken—and probably more permanently. It seems to have become the normal thing for individuals to feel sincerely that America is now committed to play a part on the international scene. While businessmen may feel that this course, even for them in the long-run, is the most desirable one to follow, enterprisers cannot easily or quickly adjust themselves to the essential consequences of this understanding. Acts by the government in taking and maintaining its foreign policy stand are apt to appear arbitrary to a profit-motive orientation. This apparent arbitrariness cannot be other than discouraging to business. (It necessitates lobbies, government intrigue and the like.) Thus business cannot avoid a certain ambivalence of feeling about the consequence of America's probable new role in relation to itself, an ambivalence that contributes actively and directly to a more easy rationalization of the attitude here under discussion.

The precise relationship between an increasing impact of international affairs upon American life and the coming of age of capitalism is much too complex to warrant extensive discussion here. However, two elements in this relationship come immediately to mind. First, insofar as the development of capitalism has made possible the excellent system of communications that welds the world into a single unit, the relationship is clear. Second, insofar as an integral part of the capitalistic system is the specialization that makes nations as well as individuals closely interdependent, the increasing incidence of international affairs upon the American economy is again clearly related to the growth of capitalism.

The above list of factors is offered primarily to bring into the open some of the things upon which a so-called maturity attitude might feed, and to emphasize that the entire pattern, considered as a whole, seems to be a function of developing capitalism. The list was not intended to account for the attitude itself, although it might be so used. The circular and mutual operation of the complex patterns that make up modern civilization would dictate that, to a certain extent, the factors producing the germ of an



attitude would also nourish it. However, the discussion to this point has been limited to the latter. It is felt that there are sources for a general attitude of insecurity that are more subtle and deeper than the factors enumerated above. Now and very briefly a few 'random reflections' as to the nature of these sources will be indulged.

Lewis Mumford, in his recent book, *The Condition of Man*,<sup>6</sup> has emphasized that in the process of building a society predicated upon the machine man has gone far toward turning himself into a machine. Some of the more outstanding ramifications of this thesis will repay examination.

Increasing specialization in conformity with the demands made by the machine has resulted in a progressive dependence for every individual inside the money nexus. This dependency tends to awaken a feeling of timidity and oppression, thus producing a yearning for some secure retreat from the machine.

A lifetime spent in close association with one small aspect of the industrial mechanism, and an educational system that emphasizes the learning of a trade rather than the understanding of the mechanisms as a whole, contribute a feeling of inevitableness toward events in history, and in consequence a feeling that life is a Frankenstein, created in good faith but seriously out of control.

Finally, after a long tradition of freedom with a frontier always available, to see this haven rather suddenly disappear and to be thus forced to solve problems rather than simply escape from them, might easily help shock into active existence underlying attitudes of insecurity. All of these things, as a part of a single, enveloping whole, would perhaps be sufficient cause for the appearance of the germ of an attitude to be nourished by the focus of attention factors listed earlier. It should be noted, too, in passing, that the general proposition stated by Mumford and briefly elaborated here, is also a product of developing capitalism.

Are we living in a mature economy? It must be repeated that this discussion does not purport to answer this question. Com-

<sup>6</sup> Hartcourt Brace and Company, New York, 1944.

mencing with the broad thesis that we live in such an economy if we feel that we do, the writer set for himself the primary problem of determining whether or not such an attitude could be justified *if it somehow came to exist*, and the secondary problem of determining whether or not such an attitude could come into existence. The result of looking for solutions to these two problems was the conclusion that this attitude could be supported by a number of facts in the economy and that the attitude could originate in the dark recesses of men's minds through the operation of the industrial mechanism and its ideology. As a supplementary result of this investigation it seems probable that both the attitude itself and justification for it are a function of the age (or stage of development) of the economic system.

There are those, no doubt, who will insist that each of the factors enumerated here has its own compensations, and that even if taken all together they do not provide adequate justification for an attitude of belief in economic maturity. The writer has taken substantial pains to grant these points throughout. But the vital fact still remains that we are not here dealing with an intellectual appraisal of objective facts. The culprit here is an attitude, and attitudes are not normally characterized by full justification nor are they careful to focus upon both sides of the proposition at issue.

An attitude is very much like the mirrors in the fun-house. It creates its image from the available material, but the image is mal-proportioned through selective over-and under-emphasis of portions of this material. Furthermore, an attitude tends to be viciously circular in its operation. Thus an attitude of fear will frequently produce the condition feared. The many factors making up the business cycle are peculiarly subject to this circular process.

Are we living in a mature economy? The writer—with the preceding discussion as background—ventures only one conclusion. We will not *know* whether or not we are until economists in general become far better psychologists than is now the case.

# With Due Respect to Adam Smith

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## I

Adam Smith published his *Wealth of Nations* in 1776. It was a great work because it presented a fairly complete and accurate picture of the functioning of the economy of his day. He was writing of an agricultural economy. He believed in the pre-eminence of agriculture in the economic system and did not foresee substantial change in that emphasis.

The principles which Adam Smith laid down and which have been added to and altered by later economists have been digested into a science known as classical economics. The source of these principles was drawn almost entirely from the behavior of agricultural commodities in a free market. To this day the typical college textbook in elementary economics describes the operation of these principles (particularly where price is involved) with examples of agricultural commodities, usually corn and wheat.

The reason we continue to use agriculture as our source for illustration of classical or *laissez-faire* economics is that agricultural commodities have remained (excluding government price fixing experiments) the one large area in our economy in which price is a direct function of demand and supply. We would be hard pressed to give a realistic example of *laissez-faire* price economics in any of the service or manufacturing fields unless we accept a time period too long for practical application.

The economy of Adam Smith was a flexible economy and continued so until perhaps the conclusion of the first World War. The Industrial Revolution had been under way only a relatively few years when the *Wealth of Nations* was published and its effect upon capital accumulation was not great until, perhaps, 1840. Although the last half of the nineteenth century found the Industrial Revolution in full sway, capital was employed in relatively small amounts and flexibility of operation was still possible. Supply and demand of labor was as susceptible to change in price and

quantity as any raw material. The fixed charges on capital were too small to have any serious effect. The result was that industry as well as agriculture remained flexible enough to give classical economics, for all practical purposes, a continuing authority, challenged only by the reformers and without notable success. In other words as long as a highly flexible economy existed classical economics presented a reasonably true explanation of the phenomena of trade.

Even Adam Smith, however, expressed fear of the power which rested in the hands of the rentiers and employers. There was a possibility in his mind that these classes of people would demand more than their just share of income and that economic laws which he saw working could be hindered in their operation. Since his day economists have been placing an increasing emphasis upon the role of monopoly and its concomitant "sticky prices." Alfred Marshall, perhaps the greatest classical economist of modern times, accepts the fact that "normal action falls into the background, when Trusts are striving for mastery of a large market; when communities of interest are being made and unmade; and, above all, when policy of any particular establishment is likely to be governed, not with an eye to its own business success, but in subordination to some large stock-exchange manoeuvre, or some campaign for the control of markets."<sup>1</sup>

What Marshall is implying is that classical economics is laboratory economics in which experiments are carried out in preparation for a trial in an economy of overwhelmingly variable costs. He is implying that "normal action" means action under ideal variable cost conditions.

If I sense correctly the feeling of the modern disciple of classical economics it is one of nostalgia for an economy so flexible that a bushel of wheat one way or the other will affect the price by a predictable amount. It is the purpose of this paper to point out that not only is there a long established trend away from this *reductio ad absurdum* but there is no likelihood in the foreseeable future of a reversal of this trend; that to persist in applying

<sup>1</sup> Principles of Economics, 8th Edition, Preface XIV, Alfred Marshall. Macmillan.



laissez-faire economics to a rigid cost economy is to be extremely unrealistic, and, if this persistence should be successful, could only lead to economic chaos.

## II

What right do we have to describe our present economy as a rigid cost economy? The term "rigid" is used, of course, in a relative sense but still the facts should fit the connotation.

Overhead costs are rigid costs. These indirect costs are slow to change by nature and are in high degree fixed. The extent of these fixed charges is the key to this discussion and will be presented later. The surprising fact is the degree of stabilization which has occurred in the prices of wholesale commodities which represent the vast bulk of raw material purchases for manufacturing.

From 1926 to 1933 the United States experienced a slight recession, a memorable boom, and a not-soon-to-be-forgotten deflation. In 1928 and 1929 an all time production peak was reached. In 1931 and again in 1933 industry was probably operating at its lowest percentage of capacity in modern times. Most indices of production show a decline of fifty-five to sixty-five percentage points from the peak of 1929 to the bottom in 1933. If our economy could be characterized as predominantly flexible we would expect, in such a period, frequent and substantial price changes in a great majority of the most widely used commodities in industry and agriculture.

A most revealing study of 747 commodities comprising the Index of Bureau of Labor Statistics Wholesale Prices was made by Gardiner C. Means, Economic Advisor on Finance to the Secretary of Agriculture, covering the period of which we have spoken, 1926-33.<sup>2</sup> Some of his findings are as follows: roughly one-fourth of the commodities changed in price less than once in ten months; one-fourth less frequently than once in four to ten months; one-fourth between one and three times every four months; one-fourth more than three times every four months. One-half of the com-

<sup>2</sup> "Industrial Prices and Their Relative Inflexibility" — Jan. 15, 1935. Described in McNair & Meriam "Problems in Business Economics." McGraw-Hill, 1941, p. 389.

modities, therefore, as far as frequency of price change is concerned, could be described as rigid. Three-fourths of the commodities could be termed rigid or relatively so. Only one-fourth, approximately, could be described as variable.

The extent of the decline in prices from 1929 to 1933 is equally interesting. Although industrial production declined roughly sixty percent, a "stickiness" was apparent in a majority of the commodity prices comprising the Bureau of Labor Statistics Index. Twelve percent of these commodities declined less than seven percent (two percent of them not at all). One-third of the commodities declined twenty percent or less. Fifty-eight percent of the commodities declined thirty percent or less. Agricultural commodities, true to the principles of laissez-faire economics, declined sixty-three percent. It is apparent that raw material purchases of industrial concerns were for the great majority of cases rigid in price through the worst economic upheaval this country has ever experienced.

I shall touch at this time on only the rigidity which has developed in contracts of employment. Organization of labor has manifestly interfered with the free operation of the law of supply and demand as applied to labor. A good many large manufacturing plants and an increasing number of small ones are employing their direct labor under contracts setting wage rates for one year or more. What strength these contracts will have in times of future depression remains to be seen, but twentieth century labor history shows a tendency for labor to retain many of its gains through serious business recessions. Floors under wages, ceilings over hours, improvements in working conditions all add up to greater rigidity of labor costs.

We have been speaking of those costs which the accountant calls direct charges and which the economist has traditionally defined as variable costs. These costs are variable only in the sense that they are not fixed. The variations are becoming less frequent and the extent of the fluctuations less great within reasonable periods of time.

As direct charges have become less variable what has been happening to the indirect charges or that group of costs which

must be apportioned to the unit of production and which do not vary directly with the volume of production?

It is difficult to tie this problem down to a concrete answer. It must be apparent that as a machine replaces a man a fixed charge is created that did not exist before. The effect of this fixed charge can be measured only in relation to the price obtained for the product, the percentage of production to capacity of the plant, and the relation of fixed costs to variable costs. It is true, however, that fixed charges must become a greater consideration in manufacturing operations as technology progresses.

One method of grasping an appreciation of the change in capital equipment which has occurred is to follow the trend of production per man-hour. Such figures are subject to interpretation, for increased production per man-hour is not caused entirely by the employment of machinery. Better coordination of the working forces and more efficient utilization of space have been important. Furthermore in many cases less expensive machinery has replaced more costly equipment thus reducing fixed charges while maintaining or increasing output. In spite of these considerations a trend in the production per man-hour gives an approximate picture of the advance of technology.

In the twenty-year period 1899 to 1919, according to one calculation,<sup>3</sup> production per man-hour increased 35 per cent; in the twenty-year period 1919 to 1939 the increase was 174 per cent; in the next four years an additional 57 per cent was accomplished. These figures picture graphically not only the great increase in technology, but the geometric progression which is taking place.

A clear picture of the impact of fixed charges as a result of progress in technology can be seen from a study of depreciation charges. The National Industrial Conference Board publishes a table of dollar depreciation and depletion charges in comparison to actual sales in manufacturing industries for the bienniums 1919-39.<sup>4</sup> In this twenty-year period value of product fell off roughly 4 per cent while depreciation and depletion charges increased 60 per cent.

<sup>3</sup> *Economic Almanac* 1944-45 National Industrial Conference Board, 157. All percentages relative to 1899=100; the increase from 1919 to 1939 based on 1919 was 129%; 1943 based on 1939 (preliminary) 18.4%.

<sup>4</sup> *Economic Almanac* 1944-45 National Industrial Conference Board, 196.

The National Industrial Conference Board has also made a study of overhead costs in manufacturing industries expressed as a percentage of materials and wages.<sup>5</sup> These percentages show a marked increase in all but one biennium from 1919 to 1931, and a drop in 1933 and 1935. The explanation of this seems clear. From 1919 to 1929 fixed charges became a larger percentage of so-called variable costs (32 per cent to 42 per cent) in spite of increased production because technology was advancing at a rapid pace. By 1931 sales had fallen off sharply and fixed charges reached 51 per cent of variable costs. As sales continued to fall industry could not support such a burden of fixed charges and severe adjustments took place in capital values. By 1935 the percentage of fixed costs to variable costs had dropped to 35 per cent, a decline of 16 per cent from 1931. However, the entire adjustment took place over a period of five to six depression years showing clearly the length of time needed to adjust a high percentage of our costs to prevailing economic conditions.

### III.

We now have an important and key question confronting us. Is the increasing burden of fixed costs the cause of rigidity in our economy? If so, the death knell of laissez-faire economics has been sounded for these costs show every tendency to increase in relation to other costs as the progress in technology continues.

In order to see better the effect of these fixed charges let us go back, for contrast, to the days of Adam Smith and the variable cost economy upon which his economic principles were based.

Variable costs by their very nature encourage the development of small producing units. When almost the entire total cost of production is easily adjustable to economic conditions it becomes highly uneconomical not to produce in small units. This is principally so because of the small cost of establishing a business and the diminishing efficiency of labor and supervision as either the hours of labor or the number of individuals is increased. Industries in which the proportion of labor costs are high find their optimum

<sup>5</sup> *Enterprise and Social Progress*, National Industrial Conference Board, 1939, p.217. (When salaries are included as overhead, corresponding figures are 1919—47%; 1929—63%; 1931—82%; 1935—52%.)



size limited to relatively small units.<sup>6</sup> The great flexibility of costs was the chief cause of the atomistic nature of the economy which Adam Smith describes.

When fixed costs become a heavy burden on industries an atomistic economy is impossible. Large accumulations of capital become necessary to start a business. Once the plant is ready for operation a large demand for the product is needed to support the high fixed costs which are present. Both because few individuals or groups of individuals can furnish the capital necessary, and because the market can only absorb the output of a limited number of mass producing plants of the same product the control of production of that product falls into the hands of a few business units. This is the inevitable trend of any industry as it is subjected to the automatism of machinery. It is the very nature of our mass producing economy. The net result, as one would expect, is administered prices and an absence of free markets.

Suppose, for instance, that in spite of this concentration of control we were able to convince or force management to operate in a free price market. The first development would be that Company "A" in a particular mechanized industry would offer some large buyer a special price slightly above the variable cost of additional units of production. In as much as fixed costs have already been covered the small increment over variable costs is so much profit. But the industry soon learns of this practice and the market price falls. Now all the goods which Company "A" sells are at the lower price, not just the additional goods it sold for the purpose of increasing its production. This plant and all the plants in the industry may be operating at a loss and large capital investments are placed in jeopardy.

What is the next move? Company "A" and the industry as a whole look around for ways of reducing variable costs. The one vulnerable spot is labor. Wages is a large cost subject to the control of management. Wage cost is cut to meet this peculiar type of price competition brought on by the element of fixed costs. Chaotic

<sup>6</sup> For discussion of this point see A. S. Dewing *Financial Policy of Corporations*, 4th Edition, Vol. 2, Chapter 2. Ronald Press, 1941.

labor conditions soon accrue and neither labor nor management can allow it to continue.

In order to prevent competitors from taking advantage of this one large loophole of variable cost, the managements of mass producing industries are becoming increasingly desirous of union control of wage rates and hours. Unions, of course, fearful of this fixed cost type of price competition are losing no time in convincing recalcitrant management. As a result of this ruinous type of competition (the early history of the railroads is an excellent example of what can happen) the cost of labor is becoming more and more a rigid cost.

The only way to eliminate rigidity in our economy is to eliminate a large proportion of our fixed costs. To do so would mean a return to small, highly competitive units in which costs could be adjusted in a short time to the needs of the moment. This change can not and will not occur until technology finds new techniques of production involving relatively small expenditures of capital. Until that day we should adjust our thinking to an inflexible economy which calls for a different attitude toward much of accepted economic theory.

#### IV.

It seems to me the law of decreasing costs deserves a great deal more emphasis. Mechanization is taking place on a large scale even in the agricultural field. Another decade and the fixed cost problem may be a serious consideration throughout our entire economy.

The law of decreasing costs is simply the observation that as volume increases fixed costs are spread over a larger number of units of production and unit costs are thereby reduced. Unfortunately this law works in reverse, too. As volume decreases cost per unit of production increases. Compare this with our old variable cost economy. When variable costs were highly predominant efficiency generally increased as volume decreased. Not only did prices drop to meet the consumer's pocketbook, but the most efficient labor was employed thus further reducing costs. In a short time the groundwork was laid for an upswing in the business cycle.

When fixed costs are heavy the opposite is true. Costs rise as volume decreases and the efficiency of labor plays a less important role. Not until capital values in general are written down drastically can current costs be adjusted sufficiently. Conditions conducive to an upswing in the business cycle in a fixed economy, unlike a variable cost situation, grow progressively worse until a point of collapse is reached.

This point of collapse is at a much higher percentage level of capacity production than has been the case in decades past. It is unlikely that our national manufacturing load factor can be allowed to fall below 60 to 70 per cent of capacity without serious economic consequences. Once the break-even point is broken it takes a tremendous accumulation of purchasing power to raise production to a profitable level. There is a serious question in my mind whether it can be raised (short of a revolution) without government pump priming on a huge scale. The situation is analogous to allowing one's house to fall below fifty degrees on a winter's night. It takes a long time and a lot of fuel to bring the temperature back to normal.

My second plea for a change of emphasis is that we learn to accept economic principles or laws for the long time periods they represent and for the great generalities that they are; that we discard any sense of awe which time and worship have instilled in us. The law of supply and demand is fundamental, yet that should not preclude us from touching it. The law of gravity is fundamental, too, but we have by-passed it to our great advantage. The law of supply and demand states that price is a function of supply and demand. It does not say that the functions singly or severally can not be controlled. It is not unlikely that through the proper use of money we may be able to control overall demand and price level and allow individual industries to adjust themselves to prevailing cost levels and utility of product. It should be remembered that the law of decreasing costs makes it imperative that we place the emphasis on volume of production. We can not give volume the sustained emphasis it needs without controlling demand or deliberately affecting it.

The New Deal felt its way along this path. It had to feel its way because the deep inbreeding of laissez-faire economics had prevented very much serious thought on the subject. It has been this lack of foresight which has left us still subject to the sweeping changes of the business cycle, and which has forced large business to attempt to lessen this risk in its own way. Many industries, such as rubber and automobiles, have extended their operations back to the source of materials and forward to the retail market. Many have bought out competitors thus spreading horizontally as well as vertically. By taking on new lines of goods heretofore foreign to them they have entered a new phase called circular growth. Such movements as these give certain industries control over the whole gamut of production and selling, and through large scale advertising they are able to achieve a measure of control over demand.

In most cases this sort of expansion, particularly when it is carried to extremes, is not conducive to efficiency. The risk involved in manufacturing through fluctuations in the business cycle has forced many of our plants to expand beyond their optimum size. Only by spreading their tentacles in all directions can they achieve a modicum of security. That they have expanded too far in the interests of security is clearly revealed in a study by the Temporary Economic Committee under the auspices of the Federal Trade Commission.<sup>7</sup> Almost without exception in industry after industry the most efficient business unit, from the point of view of unit cost of production and rate of return on invested capital, was the medium-sized unit. In the petroleum industry, for instance, not a single one of the twenty major oil companies was found to be as efficient as the medium-sized group. In the interests of security corporations have been willing to sacrifice efficiency. I believe it is not unwarranted to draw the conclusion that our unwillingness to explore soon enough ways and means of reducing the risk of the business cycle has forced a degree of rigidity within our economy which has not been necessary and which would not have occurred solely through the application of technology and the law of decreasing costs.

<sup>7</sup> *Relative Efficiency of Large, Medium-Sized, and Small Business*, Monograph No. 13, 1941.



## V.

My conclusion is brief. We have moved from an economy where the emphasis was on variable costs to one in which an increasing emphasis is being given to fixed costs. In a fixed cost economy the law of diminishing returns is postponed and may continue to be postponed depending on the degree of technological advancement. As technology progresses a larger volume of production is needed for each producing unit in order to sustain profits. Either monopoly or a few large business units in each industry become the inevitable conclusion to this trend of mechanization. Mass employment of men and capital and the penalty of operating at low volume make the risk from the fluctuations of the business cycle too great for society to bear. This very risk encourages business units to seek security through sheer bigness thus creating an unwelcome concentration of control and an unnecessary rigidity within our economy. A few business organizations may be partially successful in protecting themselves in this manner. Business as a whole, and thus society, will suffer, however, for this type of control, far from being helpful, creates a greater rigidity without the assurance of a steady and adequate demand.

In such an economy as this an economics of central control is imperative. The conditions which produced the economy of laissez-faire have gone and new ones, wholly different, have taken their place. The aspiring individualist who made a robot of an artisan settled the doom of laissez-faire. The question of whether or not we shall have government control is not a pertinent question. The question now is how much control is necessary and by what methods shall it be applied?

# Farm Housing in Oklahoma

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## INTRODUCTION

Nearly all southern states rank in the lowest one-fourth of the 48 states on each of the several characteristics of rural-farm dwellings enumerated by the U. S. Census of 1940. Undoubtedly, this indicates a serious need for better housing among farm families. It also raises a question as to why the South's farming population is not better housed. For the reason that a solution to this problem is vital to the welfare of farm people, this paper discusses the housing situation in Oklahoma, the factors contributing to it, and recommendations for its improvement. Although Oklahoma is not a typical southern state, many of the factors associated with poor housing there are found in other states of this region.

## FARM HOUSING SITUATION IN OKLAHOMA

It is assumed that the level of farm housing can be measured by the frequency of possession of housing items enumerated in the Census. These items, which pertain to the dwelling and its facilities, furnish the basis for a brief review of the farm housing situation in Oklahoma (Table 1).

A larger proportion, 51.0 percent, of rural-farm dwellings in Oklahoma than in any other state needs major repairs. The average value of farm homes also is far below the national average. A study of the 1930 Census data, which include values of dwellings for both owners and tenants, shows that Oklahoma ranks among the lowest of all the states in the ratio of value of dwelling to total value of farm.

In 1940, this State had one of the highest percentages of overcrowded dwellings in the United States. Over one-fourth of the rural-farm houses contained more than 1.50 persons per room, which was 1.7 times the national average. Since 1940 there has

\* This paper is a contribution of the Oklahoma Agricultural Experiment Station.

been some improvement in this respect due to heavy migration from the farming areas. Oklahoma ranks forty-first among the states in size of farm dwelling, the average being 3.7 rooms, but it occupies the twenty-ninth position in average population per dwelling, with 4.3 persons.

TABLE 1.

Comparison of Rural-farm Dwellings in Oklahoma and the United States According to Specified Housing Items, 1940.\*

Housing item	Okla- homa	United States	Rank of Oklahoma among all states
<i>Percentage of rural-farm dwellings with:</i>			
Major repairs needed.....	51.0	33.9	48
More than 1.50 persons per room	27.1	16.1	45
Radio .....	54.5	60.2	34
Electric lighting .....	14.4	31.3	44
Mechanical refrigeration .....	9.7	14.9	38
Running water .....	8.0	17.8	37
Flush toilet .....	4.4	11.2	37
Bathroom .....	5.1	11.8	37
Central heating.....	1.0	10.1	40
Owner occupants .....	39.8	53.2	42
<i>Averages:</i>			
Age of dwelling, years.....	22.2	28.1	13
Number of rooms per dwelling....	3.7	4.7	41
Number of persons per dwelling...	4.3	4.2	29
Value of owners' dwellings, dollars .....	551.00	1028.00	41
Mo. rent, tenants' dwelling, dollars .....	4.33	4.72	36

\*Sixteenth Census of the United States: 1940, Housing, Vol. 1, Data For Small Areas, Parts I and II, and Housing, Vol. II, Parts I to IV.

The average age of farm dwellings in the State is lower than that of all states taken together. This is due to the comparative newness of the State and more especially to the construction of low-priced homes in certain poor land areas of eastern Oklahoma during the depression of the 1930's. One-fifth of the dwellings in the State were built between 1930 and 1940, but in Atoka, Cherokee, Delaware, McCurtain, and Pushmataha Counties, for example, the proportions were nearly twice as large. These counties served as absorption areas for economically distressed families during that period.

Among the several housing items enumerated by the recent Census, the radio is found in more farm houses than any other distinctly modern convenience. Yet, nearly one-half of the dwellings do not have radios in them.

Oklahoma lags far behind most states in the proportion of farm dwellings equipped with electricity. Only one-seventh of the farm houses are electrically lighted as compared with nearly one-third of those in all states combined.

Nearly three-fifths of the farm houses in the State are without refrigeration equipment of any type. Oklahoma has a smaller percentage of dwellings with mechanical refrigeration due partly to the relative lack of electric power lines in farming areas. Fewer than one-tenth of the farm dwellings of Oklahoma have running water, which is less than one-half the national average. An inside flush toilet and bathroom are found in approximately one of every twenty farm houses in the State. Only dwellings of the most prosperous families, especially farm owners, possess these items. Central heating, though not considered essential to farm housing in Oklahoma, is found in one of each 100 dwellings, which is one-tenth of the national average.

Only two-fifths (39.8 percent) of the families living on farms in Oklahoma occupy their own homes, in contrast to more than one-half of those in all states taken together. As 45.6 percent of the farms of the State are owner-occupied, it is apparent that rented homes are more common among families of farm laborers and others residing on, but not operating, farms, than among those of farm operators.



## FACTORS ASSOCIATED WITH FARM HOUSING

An explanation as to why farm housing in Oklahoma does not compare favorably with that of the Nation as a whole is needed. While this study is not an exhaustive appraisal of farm housing, it indicates (1) some of the more obvious farm housing problems in Oklahoma, and (2) analyzes some specific factors influencing housing.

For present purposes, the farm housing problems which appear to be of greatest importance in the State can be classed conveniently into these groups:

## I. ECONOMIC

1. A large proportion of farms are too small to support reasonably adequate housing.
2. The system of farming followed does not permit full use of productive resources.
3. In the competition for funds between farm and family, the latter is at a serious disadvantage. Utilitarian values frequently suppress those which are esthetic and provide no monetary return.
4. Better housing is a concomitant of home ownership, and high proportions of farm tenancy contribute to low standards of housing.
5. Poor housing is associated with high illness rates and a greater need of expenditures for health.
6. Farm families are excluded almost entirely from the benefits of the federal housing program.
7. The costs of housing, including debt service, are too high, thereby preventing low-income families from having improved housing.

## II. EDUCATIONAL

1. The open-country population, especially men, are not deeply housing conscious.
2. The open-country population has habituated itself to low levels of housing. Custom acts as a powerful force in conditioning attitudes toward housing, thereby deterring changes which seem to be desirable.
3. Farm people frequently do not make those improvements in housing which can be obtained with small or no cash outlays.

III. TECHNOLOGICAL—The prevalent types of construction require such large cash outlays that low and moderate income families cannot pay for comfortable housing.

## IV. GEOGRAPHICAL

1. The warm climate which prevails generally in the South tends to foster inferior housing construction.
2. Extremes in the weather of western Oklahoma lead to rapid deterioration of poorly constructed dwellings.
3. The location of houses on scattered farmsteads, especially on the checkerboard land surveys of Oklahoma, makes such utilities as gas, electricity, and running water accessible to the open-country population only at relatively high costs.

The foregoing list furnishes a background or frame of reference for the analysis of housing and its related factors which follows.

Economic factors are paramount in any analysis of farm housing problems in Oklahoma. The size, type, and organization of farms appear to be important determinants of wealth and income, which in turn influence the level of housing.

Farm housing is most highly related to size of farm. Among a series of correlation coefficients calculated between a rural-farm housing index and specified characteristics of counties based upon data from the 1940 Census, the largest coefficient is between the index and value of land and buildings per farm (Table 2).<sup>1</sup>

TABLE 2.  
Coefficients of Correlation Between Rural-farm Housing Indexes  
of Counties in Oklahoma and Specified Social and  
Economic Characteristics.\*

Item	Coefficient of correlation ( $r$ )	Coefficient of determination ( $r^2$ )
1. Ave. val. of land and bldgs. per farm	.85	.73
2. Percent of farm land used for crops	.81	.65
3. No. children under 5 per 1000 women 15-44 yrs. old.....	-.81	.65
4. Ave. val. of implements and machin- ery per farm.....	.80	.63
5. Ave. val. of land and bldgs per person	.79	.63
6. Population per dwelling.....	-.79	.63
7. Ave. income per rural-farm person	.77	.60
8. Percent of farms with tractors.....	.77	.60
9. Ave. no. years lived on present farm	.73	.53
10. Percent of rural-farm labor force un- employed .....	-.70	.49
11. Average grade completed in school....	.69	.48
12. Ave. val. of land and bldgs. per acre	.68	.47
13. Percent of farms using hired labor....	.68	.47
14. Ave. no. of cows per 1000 population	.67	.44
15. Ave. no. chickens per 1000 population	.65	.42
16. Percent of farms operated by owners	.61	.38
17. Percent of farms self-sufficing.....	-.59	.34
18. Percent of farms with fewer than 100 acres .....	-.55	.30
19. Percent of dwellings occupied by		

\* The original data were taken from the 1940 Census

<sup>1</sup> The housing index used in this study is based upon 16 items taken from the 1940 Census and is constructed on the principle of standard scoring. Its validity and reliability have been established in another study by the writer, "Comparison of Farm Housing Indexes for Oklahoma," which is to be published in a forthcoming issue of *Social Forces*.

Also, there is a high degree of relationship between the housing index and value of land and buildings per rural-farm person and per acre (Items 5 and 12 of Table 2). The intensity of land use seems to be a concomitant of size of farms in this State, and the housing index correlates highly with one measure of it, the percentage of farm land used for crops (Item 2). Apparently acreage per farm is not as suitable a reflector of size as is usually supposed because urbanization and other factors tend to obscure the relationship. The housing index and the percentage of farms in each county with fewer than 100 acres show only a moderate amount of correlation (Item 18).<sup>2</sup>

The level of farm housing depends largely upon the income of the population in agriculture. There is a marked positive relationship between the housing index and the value of farm products, sold, traded, or used at home per rural-farm person (Item 7). Inferior housing appears to be most widespread in those counties where employment was greatest in the rural-farm labor force in 1940 (Item 10).

The type and organization of farms are not as important as size, but nevertheless they are significant factors in influencing the level of farm housing. In Oklahoma, the counties with the largest percentages of crop land in wheat tend to have superior housing.<sup>3</sup> Examination of data on individual farms also shows that livestock farms have better than average housing. On the other hand, counties stressing the production of cotton have relatively poor housing. Similarly, inferior housing prevails in those areas where self-sufficing agriculture prevails (Item 17).

In recent years, considerable emphasis has been placed upon organizing the farm unit to produce larger quantities of food for home use. It is important to note that there is a marked

<sup>2</sup> When sixteen highly urban counties are removed from the calculation, the correlation coefficient between these two variables becomes .78, indicating a rather high degree of association.

<sup>3</sup> The coefficient of correlation (biserial  $r$ ) between the housing index of 21 counties with one-fourth or more of the crop land in wheat and the remaining 56 counties amounts to .86. The corresponding calculation between the indexes of 13 counties with one-fourth or more of the crop land in cotton and the other 64 counties yields a coefficient of -.30.

degree of relationship between the housing index and the numbers of cows and chickens per 1000 rural-farm population (Items 14 and 15). In other words, counties with more adequate numbers of cows and chickens per farm family have better housing.

The level of farm housing and the amount of farm mechanizations are closely related. This is shown by the high correlations between the housing index and average value of implements and machinery per farm and between the index and percentage of farms with tractors (Items 4 and 8). Farms with tractors tend to be larger than average and their incomes consequently greater. The current trend toward larger farms and increased mechanization should eventually lead to better housing among families of farm operators. In this connection, it can be observed that farm housing improves in counties with increasing percentages of hired labor used on farms. (Item 13.)

Having treated certain economic factors associated with farm housing, it is equally important to examine some of the social correlatives of housing in this State.

The quality of farm housing is related inversely to the size of family and fertility rates (Items 3 and 6). Inferior housing prevails in the poor land areas of the State, and it is in these areas where families tend to be large and birth rates highest. The high, inverse correlation existing between the housing index and the number of children under 5 for each 1000 women 15 to 44 years of age supports this point. Obviously, a large proportion of population in this State is born and reared in housing situations which few people would regard as desirable.

The low level of farm housing in Oklahoma can be traced partially to the relatively short duration of occupancy on farms (Item 9). From other data at hand, it is apparent that the most frequent movers occupy the poorest houses in an area. However, this does not imply that if farm families reduced greatly, or ceased, their changes in dwelling place that their housing status would improve automatically. Small farms, poor land, tenancy, migrancy, and large families frequently characterize areas having poor housing.



Farm housing, as measured by the housing index, appears to be less closely related to ownership of home or farm than to size of farm upon which income depends so heavily (Items 16 and 19). Undoubtedly, farm tenancy is one deterrent to improved housing. Many landlords cannot make improvements on dwellings because the small incomes received from the land do not warrant them. At the same time, tenants on small farms who move every year or two do not accumulate a large amount of household equipment.

The degree of urbanization appears to be partly responsive for the level of farm housing. In sixteen counties of Oklahoma with 40 percent or more of the total population classed as urban, the average housing index score is 55.7 as compared with an average score of 49.0 in the remaining counties.<sup>4</sup> Many families in highly urbanized counties who supplement their farm income by work at nonfarm pursuits have a higher level of housing than the average farm family. Part-time farming generally does not result in an improved housing situation. Available data show that counties in which large percentages of farm operators report working 100 days or more off the farm score about the same on the housing index as do other counties. Probably it could be shown, if data were available, that variations exist in the housing of part-time farmers engaged in specific nonfarm industries principally because of differential wage rates. Farmers who work in the oil fields appear to have better living conditions generally than those who engage in mining and timber-cutting.

The relative fewness of Negroes in Oklahoma tends to minimize the effect of this segment of population on farm housing. However, in six of the seven counties in the State with more than 15 percent of the rural-farm population classed as Negro, the housing index scores are considerably below the state average. Wherever Negroes live in Oklahoma or elsewhere in the South, poor housing is almost an inevitable concomitant. This situation stems from their relatively low economic status over which they themselves have little control.

Another factor which influences farm housing is the level of schooling. A moderately high correlation coefficient is obtained

<sup>4</sup> The coefficient of correlation (biserial  $r$ ) amounts to .47.

when the housing index scores are correlated with the average number of grades completed in school by the population 25 years old and over (Item 11). Doubtless, schooling plays an important role in shaping wants and desires, and a rising level of education can be a strong creative force in fostering improved housing.

Another factor which helps to explain the generally low level of farm housing in Oklahoma is the recency of settlement. Many of the original dwellings on farms are still occupied. Built when land values, incomes, and building costs were lower than now, neither the present worth of these dwellings nor their replacement value at present costs of housing is commensurate with farm wealth and income now. Land values, especially, have risen rapidly since the period of early settlement, due not so much to increased productivity as to inflation arising from mineral and other nonfarm speculation in farm land. Also, farms have increased in size without proportionate changes in the quality of housing.

The neglect of farm housing in Oklahoma possibly arises in part from the speculative, hazardous nature of farming due to unstable climatic factors. Farm risks are greater and interest rates higher here than in some other states. This, in turn, necessitates stress on the money-making aspects of farming and discourages investments in housing, which consists chiefly of consumable items.

#### RECOMMENDATIONS FOR IMPROVEMENT OF FARM HOUSING

Housing, like food and clothing, is a vital human need, and society always finds ways of satisfying its essential wants. Whether the farming population places as high a value on housing as the needs warrant, and as the resources permit, can be questioned. Obviously, farm housing in Oklahoma and the South generally should be improved, and suggestions or recommendations for action toward this end are offered here.

Since the economic bases, that is, wealth and income, appear to be the primary limiting factors in the achievement of better housing, efforts to consolidate uneconomic farms into adequate family farm units should be encouraged. Not only should farm

income be increased by more effective use of these resources: land, labor, capital, and management, but also an equitable distribution of this income among all tenure classes is of paramount importance.

It if is not possible to absorb the population displaced from agriculture through measures intended to broaden the economic bases of housing, then subsidies for housing to low income groups is as necessary and desirable for the maintenance of health and welfare in farming as in urban communities.

Private lenders should be encouraged to offer credit upon more favorable terms for housing construction, the loans possibly to be guaranteed by the government in a manner somewhat similar to FHA insurance of urban housing loans.

Appropriations for the Federal Public Housing Authority should have as one basis of apportionment the rural-urban distribution of population. To make these funds available, all states should enact legislation providing for the establishment of local housing authorities.

A tenant purchase program, similar to that in existence, should be created and expanded under federal and state cooperation. Also, rehabilitation loan and farm mortgage loan programs should be enlarged to provide funds for the construction or repair of farm dwellings.

The costs of housing should be reduced through the development of new types (prefabricated dwellings, for example) and by controlling the monopolistic tendencies which dominate the home-building industry.

A vigorous educational program is needed to inform farm people of the importance of improved housing and of resources available to achieve it. This program should be among the major objectives of all federal and state agencies of agricultural education in so far as their services can be adapted to it.

Above all, as a result of educational effort, the farming population of Oklahoma and the South generally needs to develop a greater appreciation for housing than is now prevalent. The

typical farm housing situation in the southern region, i.e., dwelling, facilities, and surroundings, is a sordid, unattractive, and depressing sight. The family, the school, the neighborhood, and other community organizations should make a concerted attack upon farm housing problems.



# Some Notes on the Social Psychology of the Hero

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## I.

### THE SCIENTIFIC STUDY OF THE HERO

The study of the heroic lends itself to a psycho-cultural analysis in which most of the phases of human motivation and action pass in review. Thus, the student of culture may regard the hero as a paradigm, and he may see him successively as a folkic exemplar (messiah, founding father, Robin Hood, emancipator); as a specialized model (the heroic doctor or lawyer or statesman); as a promotional device (the professional hero, the creation of publicity bureaus, the victim of war or class mongers); as a recreational agent (the hero of romance, the folk tale, the drama).

Or the student of society may use the hero as a foil for social theory. The hero may illustrate social interaction in its myriad forms: social control, leadership, imitation, propaganda, the social movement, crowd psychology. He may be used to show the operation of psychic processes: projection, identification, the symbolic model, suggestion, the mirrored self. He may be utilized to typify the whole culture or perhaps some aspect of it. He may be thought of as an index of the national mind or spirit. He may be put forward as an explanation of historic change: the Great Man theory. He may be the object of considerable curiosity in himself: the debunking biography, the psychograph, the case study.

Finally, the student of society may make the hero the object of empirical fact-finding, as a means of gathering information about human behavior in some important human situations. The latter possibility offers some interesting suggestions: the hero who failed, the radical hero, the heirs of heroes, the hero as enemy (Lincoln vs. Booth), the professional hero, the hero of literature, the "marginal man" as hero, the hero with clay feet, the collective heroes (i.e., the stereotyped composite models—

the "common man," "the underground," "Jacques," the "peasant," the "bourgeoisie," the "proletariat").

In the present study the heroic idea will be examined in successive historic contexts and some aspects of the use and abuse of heroes will be discussed.

## II.

### THE HEROIC IDEA

A recent article in praise of a modern hero contains the significant warning: "In everything you say, you are no longer talking about a man, but about a hero, a martyr, a symbol. Words seem a desecration."<sup>1</sup> This sense of transcendence is ancient. Primitive and early peoples felt it, perhaps far more than does modern society; the hero in a pre-industrial age was seldom, if ever, a literary or promotional excursion. The coming of the epic tales marks a significant change in the heroic idea.

*Heros* meant to the Greeks "perfect man." There has always been a fetishistic element in the heroic idea.<sup>2</sup> There is the idea that the hero is himself a source of *mana*. Fiat magic with its traits of benevolent will idealized the hero, successively promoting him from the exceptional man to the super-spirit to the demi-god and finally to the status of godhead itself.<sup>3</sup> This exaltation took no single path; it was subject always to the general personality development of the people.<sup>4</sup>

The mythic heroes exhibit very strikingly this principle of the imputation of magic powers. They are, of course, not to be understood apart from the general processes and significance of myth and myth-making. The setting of the myth is conducive to the heroic. The typical theme of the myth is tragic, "a recognition of natural conflicts . . ."<sup>5</sup> The death of the hero symbolizes

<sup>1</sup> L. Aragon, "Life and Death of a Hero," *New Masses*, LIV (January 23, 1945), 3.

<sup>2</sup> D. Wecter, *The Hero in America* New York, 1941, 8.

<sup>3</sup> Cf. C. H. Toy, *Introduction to the History of Religions* Cambridge, 1924, Chapter VI.

<sup>4</sup> Cf. L. L. Bernard, "The Unilateral Elements in Magic Theory and Performance," *American Sociological Review*, III December, 1938, 771ff.

<sup>5</sup> S. K. Langer, *Myth in Primitive Psychology* New York, 1926, 19.

the death of group values,<sup>6</sup> and his life is expressive of the ethos of the group. Whether the mythic hero ever existed or not—the question is controversial<sup>7</sup>—is less important than the “stylistic dignification” of cultural values which he expresses.<sup>8</sup> The “culture-hero,” then, is the proto-type of all heroes: he is a “vehicle of human values,” a “metaphysical view of life.”<sup>9</sup>

Epic literature has set the pattern of heroic behavior perhaps more effectively than mythology. The heroic scene in epic story is military, courtly, adventurous; the accessories are military; the traits are typically physical courage, personal loyalty, priestly generosity; and the traits of the enemy of the hero have a familiar ring today—disloyalty, treachery, avarice, cowardice, violence. Indeed, hero-worship in wartime, even modern wars, reverts to the epic story. The fact that the heroic person is the prince and his court should not lead the observer to the altogether too simple conclusion that the heroic sense of life is evoked only in the social setting of *noblesse oblige*. The heroic prince is merely a medium through which living is made acceptable, or “negotiable,” by translation into royal attributes.<sup>10</sup>

Cultures which have followed the epic age have used other symbols and settings of heroism. Of course, the gods and the princes set the pattern, but the personnel and the stage scene changed. Thus, devils have performed an heroic function; devils have the attributes of the gods: some are “heathern” gods, some “fallen angels,” and others “sons of God.” There is a kind of gradient in the worship of the devil as hero: first as ex-gods, then as sins, finally as evil thoughts; but whatever his name and form his role has been dramatic and moral. He has “fulfilled for humanity a need for moral equilibrium.”<sup>11</sup> Personifying the

<sup>6</sup> G. Salomon, “Hero Worship,” *Encyclopedia of Social Sciences*, VII: 336-8.

<sup>7</sup> Cf. Lord Raglan, *The Hero, A Study in Tradition, Myth, and Drama* London, 1936.

<sup>8</sup> K. Burke, “A Recipe for Worship,” *Nation*, 145 August 21, 1937, 201.

<sup>9</sup> Langer, *op. cit.*, 185, 203. Also L. R. Farwell, *Greek Hero Cults and Ideas of Immortality* London, 1921.

<sup>10</sup> Burke, *ibid.*

<sup>11</sup> Cf. M. Garion and J. Vinchon, *The Devil: An Historical Critical and Medical Study* New York, 20.

practical dualism of life and thought, he has been the horrible which high-lights the beautiful. He was often the expression of the daily terror of repressed life.<sup>12</sup> His decline paralleled the decline in the belief in personal gods or God. His existence in human thought is a mark of an ethical difficulty, of the presence of clashing cultural values; the cult of the devil, like the cult of the gods, took vitality from this fact.

The heroic idea is the heart of messianism: the messiah is the culture-hero in an historic setting. Culture drift with attendant social needs and responsive persons becomes the ground of messianic movements. Karl Kautsky's observation in his *Foundations of Christianity* that there was in Rome at the time of Christ a son of God on every street corner underscores this general theme. The Christian hero is a symbol of the salvation of threatened values. The messianic hero, always tragic, is seldom utopian; he is an ideologist, conserving the traditional. Utopian heroism was ushered in with the secularization of the heroic idea and its consequent divorce from traditional sacred rituals.

The secularization of the heroic idea was a slow process. When the gods fled to Olympus and the epic heroes to their ancestors, the new Paradise had to have a new population.<sup>13</sup> The saints were made to perform the heroic office. Certainly all the heroic services are rendered by them: intercession, worship of relics, canonization (cognate with *heroisation*). Formed by the convergence of the cult of martyrs (Rome) and the cult of epic heroes (Greece), the saint was the heir of all previous heroic patterns and processes, and the multitude of occasions for heroic (that is, saintly) legends is startlingly similar to that of mythic or epic hero tales. The problem and processes of the saints' legend can be studied in very much the same terms and spirit as primitive mythology.<sup>14</sup> For "the saint is the child of folklore . . ."<sup>15</sup> Canonization, like *heroisation*, proved to be "a most effective instrument for socializing the saintly ideal while at

<sup>12</sup> Cf. Fr. L. Coulange, *The Life of the Devil* New York, 1930.

<sup>13</sup> Cf. P. Saintyves, *Les saints successeurs des dieux* Paris, 1907, 19.

<sup>14</sup> Cf. G. H. Gerould, *Saints' Legends* Boston, 1916.

<sup>15</sup> J. M. Mecklin, *The Passing of the Saint* Chicago, 1941, 17.



the same time insuring the perpetuation of group values.<sup>16</sup> The vitality of the saintly hero is a function, in a very direct sense, of the vitality of the Christian myth; but the popularity of the saint, while dimmed by increasing secularization and sophistication, is peculiarly sensitive to periods of tremendous cultural change. The recent revival of the religious (saintly) hero in current fiction or the use of St. Christopher medals are cases in point; of course, the pecuniary motive and the sense of good market values should not be neglected.

Since the saint, there has been a cycle of heroes among the people of the West; but it is difficult to say just what the cycle has been. Wecter proposes a sequence of kings and aristocrats, yielding in turn to the self-made man, and culminating in our day in the "little man."<sup>17</sup> Belloc's approach is a little different. "First an outstanding, rather applauded thing, a figure acclaimed as a representative of his nation or times, a leader, a doer of great deeds. Next it has come to mean the subject of romance. And all the time it has also meant a person who suffered out of all measure (and successfully!) for a point of honor or of morals."<sup>18</sup> A possible cycle, covering a much longer time, postulates an evolution from the devotional hero (god, messiah, saint), through the philosophic hero (e.g., the Shakespearean hero), the paradigmatic hero (Hollywood movie, conventional romantic fiction). Certainly the hero has lost his ritualistic setting for the most part; the nearest approach to heroic rituals is the awarding of medals, military or otherwise. Nevertheless, the literature of citations stirs with the heroic ideal: "singularly meritorious act of extraordinary fidelity"; "gallantry in action"; "specially meritorious service"; "distinguished service." The word "service" is probably significant of contemporary thinking. The ceremonialism of modern heroic award-making is accompanied by much pageantry, as much as is possible; but the pageantry can hardly fill the void which a secularized heroism unavoidably creates. Nevertheless it is still able to dignify human action; the heroic idea has never done more.

<sup>16</sup> Mecklin, *op. cit.*, 63.

<sup>17</sup> Wecter, *op. cit.*, 7.

<sup>18</sup> H. Belloc, "Heroes and Martyrs," *Commonweal*, 12 (1930), 341.

## III.

## THE HEROIC PROCESS

This sketch of the history of the heroic idea has perhaps already suggested the nature of the heroic process. Hero myths, it was pointed out, are "the fulfillment of wishes . . ." <sup>19</sup> But the wishes are crystallized as group values, and the hero is both an integrant and a champion of one set of values in conflict with another. The heroic story is drama in which the world is viewed as divided between good and evil. This struggle is an intensely human one, and it is highly personalized. The hero is the image of the self fighting the evil and victoriously winning, or perhaps tragically failing (if only temporarily). The individual listener to the hero tale is both actor and onlooker.<sup>20</sup> It is to this division of the self, "and its extension within the social mind, that we owe the birth of the hero." <sup>21</sup> Hence: "psychologically one hero illustrates all heroes." <sup>22</sup>

The phenomena of hero worship revolve around the familiar processes of projection and identification. The hero is a model for behavior. Models are, of course, fluid, subject to the vicissitudes of culture change and of age. The heroes of one culture are not commonly the heroes of another, except perhaps in a literary sense; the heroes of religion are exceptional cases. If a great tradition does manage to transmit the heroes of one culture to another, they are enormously if subtly adapted to the new values. One generation burns its saints in oil, and another beatifies them. Heterodoxies are in time transmuted into orthodoxies. The hero must act his age.

In spite of the changing fortunes of a given hero, so tenaciously do we cling to the heroic ideal that our very faculty of hero worship "becomes itself a form of heroism." <sup>23</sup> This urgency for

<sup>19</sup> Cf. K. J. Karlson, "Psychoanalysis and Mythology," *Journal of Religious Psychology*, VII (1914), 204.

<sup>20</sup> Cf. T. Burrow, "The Heroic Role, An Historical Retrospect," *Psyche*, VII (1926), 44.

<sup>21</sup> *Ibid.*

<sup>22</sup> Burrow, *op. cit.*, 48.

<sup>23</sup> E. R. Bentley, *A Century of Hero Worship* Philadelphia, 1944, 34.

an heroic ideal becomes itself particularly heroic when the hero proves to have clay feet, or is otherwise debunked, or is shuffled off into limbo by "the times," or is otherwise re-valued by the changing perspectives of the age (or the worshipper's age), or—and this is especially tragic—is brought into mortal combat with a challenging heroic ideal.

The traits of the hero must somehow stay within the range of group values. This is no mean feat in a dynamic society whose values often shift swiftly. It was a simpler task in older societies where the ethical dualities were less complicated and the moral orientation sharper. The hero in modern society easily "slips," or is quickly forgotten, while hero worship itself turns elsewhere. Publicity bureaus and propaganda agencies (i.e., government and private "public relations departments") must be prepared for sudden changes in the hero market; stocks up today may skid tomorrow. Moreover, the acids of modernity are ever so destructive of hero reputations. The cynicism of the camera eye or the debunker's art nowadays makes the hero tale like today's newspaper story, quickly and lastingly stale.

Even so, the traits of the hero are persistently primary group values. Heroic behavior has been in point of fact patterned and is still patterned by the myth makers, and the characteristic features of the hero still reflect the myth maker's primary group values. The local hero, the national hero, the tribal hero alike reflect the ethnocentric attitudes, the primary emotions, the we-group enthusiasms. The ethical orientation out of which heroism and hero worship both spring still opens upon a set of narrow, localized, intensely emotional and exclusive values. The heroic is seldom the abstract, the intellectual, the collective drama of a world-oriented, intelligent people. Our heroes are now what they have always been, the measure of the range of our values.

Hero worship reflects the heroic roles of which a society has need. "I have tried to show," says one writer, "by copious quotation what the Ideal General should be like, and how the young warrior, who aspires to be such, should comport himself."<sup>24</sup> A

<sup>24</sup> F. J. Huddleston, *Warriors in Undress* Boston, 1926, x.

frequent inspiration of hero worship is success. This inspirational need is particularly keen, according to one writer, "in days of drabness," when "it is well to know something of unconventional success."<sup>25</sup> The promotional uses of the hero must not be overlooked. There are times when heroes must be manufactured as a morale or sales device. This use in times of war is too familiar for much comment here, but other uses should not be omitted. Thus, the editor of a series on "creative personalities" writes: "This series is designed primarily for young people and leaders of young people, though it will prove of equal interest and value to those who enjoy high adventure."<sup>26</sup> Occasionally the hero has been utilized negatively, as Emerson once suggested: "The reputations of the nineteenth century will one day be quoted to prove its barbarism."<sup>27</sup> The hero as iconoclast or as the symbol of iconoclasm has been a theme eloquently developed by Shaw, Wagner, Nietzsche.<sup>28</sup>

The use of the hero as a paradigm was one of Carlyle's theses: heroes as "the modellers, patterns, and in a wide sense creators, of whatsoever the general mass of men contrived to do or to attain . . ." <sup>29</sup> He did not neglect by any means the use of the hero as savior. "In all great epochs of the World's history, we shall find the Great Man to have been the indispensable savior of his epoch . . ." <sup>30</sup> In this sense the hero is less the iconoclast, more the traditionalist: "Every Great Man, every genuine man, is by the nature of him a son of Order, not of Disorder."<sup>31</sup> But his messianic value in time becomes his paradigmatic value. The reason is clear. "The true answer to the tragic in life is the heroic."<sup>32</sup> In a situation of stress, a model is a critical need, for it is in just such situations that heroic action itself arises: "heroic action can count decisively only where the historical situation

<sup>25</sup> D. C. Steitz, *Uncommon Americans* Indianapolis, 1925, 1.

<sup>26</sup> P. H. Lotz, *Creative Personalities* New York, 1941.

<sup>27</sup> *Representative Men*, 32.

<sup>28</sup> Bentley, *op. cit.*, 189.

<sup>29</sup> *On Heroes, Hero-Worship, and the Heroic in History* New York, 1903, 1.

<sup>30</sup> *Op. cit.*, 131.

<sup>31</sup> *Op. cit.*, 203.

<sup>32</sup> W. M. Salter, "The Tragic and Heroic in Life," in H. J. Bridges, ed., *Aspects of Ethical Religion* New York, 1926, 55.



permits of major alternative paths of development."<sup>33</sup> The hero as model becomes imperative in the forking-points of experience, whether of the group or of the individual. Whether professional or folkic, the hero model serves as the carrier of cultural values as well as a pattern for personal experience.

<sup>33</sup> S. Hook, *The Hero in History, A Study in Limitation and Possibility* New York, 1941, 109.

## Lotteries

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Recent proposals by members of Congress that a national lottery be established for the purpose of raising revenue for the national government are indicative of a recurring interest in such schemes. Representatives Knutson of Minnesota and Sabath of Illinois are the authors of the proposed legislation and the estimated yield is from \$1,000,000,000 to \$2,000,000,000 a year.

When the merits or demerits of lotteries are considered, we find these major arguments for lotteries: first, that they are good revenue producers; second, that considerable sums of money are spent for foreign lottery tickets anyway, and this money might as well be kept at home; third, that the gambling instinct is so strong that "policy" and "number" rackets flourish, hence a lottery conducted under government auspices would put an end to these schemes.

The arguments most often heard against lotteries are: first, that they constitute gambling and thus are morally wrong; second, that many of the people who buy lottery tickets cannot afford to do so, consequently their purchasing power is lowered; third, that the possibility of getting "something for nothing" tends to destroy public morale.

In view of the enthusiasm with which the proposal for a lottery is being advanced in some quarters it might be of interest to look at some of the lotteries which have existed in this country. Much information concerning American lotteries is found in the portion of the Annual Report of the American Historical Association for 1892, entitled "Lotteries in American History" by A. R. Spofford, Librarian of Congress. According to this report, the first record found of a lottery in our own country appears in the third charter granted by King James to the Virginia Company in 1612. We are told that the lottery tickets were subscribed to by guilds in London and that two London churches spent £6 in Virginia lottery tickets. There were many lotteries in the early history of Pennsylvania;

for example, in 1784 Benjamin Franklin and others set up a lottery for the purpose of raising £3,000 for the erection of a battery on the Delaware River. Among others was one of £1,125 for the use of a public English and Dutch High School in Philadelphia; one to raise 3,000 "pieces of eight" to finish the Episcopal Church on Third Street in the same city; and one to raise £1,350 for the St. James Church in Lancaster.

Yale and Harvard were early beneficiaries of lotteries. In 1750 a lottery was authorized to raise funds for a new building at Yale, while in 1772 Harvard was given the right to establish a lottery for the construction of Stoughton Hall. This lottery ran for ten years and produced \$18,400. In 1788 Harvard was authorized to conduct a lottery for the purchase of a planetarium, and in 1806 the college received \$29,000 in a lottery to build Holworthy Hall and to repair Massachusetts Hall.

Faneuil Hall in Boston was erected through funds raised by a lottery and Spofford says in the American Historical Association report: "After the burning of the first edifice in 1761, at a time of much financial depression, the selectmen of Boston were instructed by a town meeting to petition the general court to empower some suitable person to raise by way of lottery such a sum of money as would be sufficient for the re-building of Faneuil Hall. The legislature granted the petition, and the profits of the lottery, which had several drawings extending to 1764, were applied to building the second Faneuil Hall, which held the town meetings of the Revolution, and still stands as a place of public assembly."

George Washington participated in the lotteries of his time, and in 1836 the Virginia Legislature authorized a lottery for the benefit of Thomas Jefferson so that Monticello could be saved. Before the lottery was organized voluntary subscriptions raised \$18,000. Jefferson, however, had debts of around \$80,000 and some of the estate had to be sold.

Louisiana was the last stronghold of the lottery. In his "Twenty Years of the Republic" published in *The Bookman* of May 1905, H. T. Peck says that the Louisiana Lottery was chartered in

1868 by a "carpetbag" legislature, and that the promoters of the lottery secured the services of General Early and General Beauregard to supervise the monthly drawings. The state treasury was to receive \$40,000 a year from the lottery company for a period of twenty-five years. It is estimated that the lottery company had a revenue of \$4,000,000 per year and out of it paid in prizes \$2,124,000; commissions and incidentals \$825,000; advertising \$187,500; and premiums to the state \$40,000; total \$3,176,500. Thus there was a balance of \$823,500. Eventually the legislature passed an Act repealing the grant to the lottery company and prohibiting it from selling any tickets after March 31, 1879. However, a new state constitution adopted in 1879 gave the legislature the right to grant lottery privileges, provided the sum of \$40,000 a year should be paid into the state treasury for the use of the Charity Hospital of New Orleans. There was also a provision that all lotteries should be prohibited in the state after January 1, 1895.

From the report of the American Historical Association (1892) we learn that in 1890 the lottery company offered the legislature \$500,000 a year for the extension of its franchise, increased this to a million dollars, and then got an act through the legislature providing that a constitutional amendment be submitted to the people, providing that a lottery privilege be granted for twenty-five years in return for an annual payment to the state of \$1,250,000. The Act was vetoed by the governor. Meantime, Congress passed the Anti-lottery Bill of 1890 largely as a result of public resentment against the Louisiana Lottery.

Although, there is, every once in a while, a revival of interest in proposals for lotteries to be operated under governmental auspices for raising revenues, it appears that lotteries have been largely discredited in the minds of the people. Just now, undoubtedly, there will be continued advocacy by some persons and some organizations for a national lottery. The economic effects as well as the social effects resulting from the establishment of a gigantic lottery scheme may well be matters of concern.

One result of the operation of a lottery if experience is any guide to what could happen, could be that money which might



otherwise go into insurance, savings accounts, and bonds of the United States and of the States would be drawn into a scheme to get "something for nothing." We learn that where lotteries have operated people have done strange things in the effort to be winners Marquis James, for example, in his book *They Had Their Hour* says of the "policy" racket which swept New Orleans along with the lottery: "Policy swept New Orleans like an epidemic. The receipts reached sixty-five thousand dollars a day. The quest for lucky numbers was fantastic. Men stopped children on the street and asked them their ages. To see a stray dog meant to play 6. A drunken man was 14, a dead woman 59, a dream of fish 13. Dreambooks were sold by the thousands. School children took quarters from the family till to play policy. Office boys embezzled their employers' postage stamps. Housewives skimmed their tables and the negro population was demoralized." Thus excess in one sort of risk-taking carries with it further excess.

Although it may be argued that from four to six billion dollars are spent in the United States annually on existing lottery, numbers, and policy rackets and that a legalized national lottery would remedy this, yet the fact still remains, as suggested in a recent editorial in the *Dallas Morning News* that the lottery is the most insidious form of gambling because in addition to all the other appeals of chance, it runs into such figures that the mind loses all sense of proportion. Lotteries certainly create no wealth even though they may appear to do so through some redistribution of money. Henry Fielding has well said: "A lottery is a tax upon all the fools in creation."

# The Unity of Science Movement

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Within the last ten years we have seen the confluence of two great philosophies of science; namely, rationalism and empiricism. No longer do we argue: How do we get hold of true statements about the world of fact, through reason *or* through sense experience? Rather the question has become: What is the functional relationship between formal reasoning (pure logic) and sense experience (knowledge of which we are *positive*, i.e., empirical knowledge). Philosophers and scientists have tried to name this new philosophy of science. Some have called it simply "the unity of science movement," but it is known professionally as "logical positivism" or "logical empiricism."<sup>1</sup>

This new philosophy is not another philosophy in competition with older philosophies such as realism, idealism, pragmatism, etc. It is a philosophy of science in the broad sense of the word, representing a synthesis of the better parts of all these philosophies, condemning each in so far as it is either incomplete or an over-generalization of a limited and, therefore, inadequate part of the scientific method. Rationalism is not false; it is inadequate. Any philosophy appears to be false when a relatively minor concept has been proposed as a fundamental principle. Those who believed rationalism to be adequate have over-generalized. According to logical empiricism the same can be said of many other philosophies. They are over-generalizations when compared to scientific methodology.

Unlike most syntheses of ideas in the past, the unity of science movement is taking place by a community of scientists and not

<sup>1</sup> Professor Charles W. Morris proposed "logical empiricism" as over against "logical positivism." The former name is more appropriate inasmuch as the movement is more than simply adding logical rigor to 19th century positivism.

by one man such as an Aristotle, an Aquinas, a Leibniz, etc.<sup>2</sup> Furthermore, this community of scientists is almost world-wide in scope and in interests. And although the universal and social nature of science is implicit in its method, an explicit consciousness of this fact, with the understanding that this consciousness would result in the more effective application of science, has developed within the past few years. Despite the fact that many old-line philosophers and scientists do not like to admit it, this new synthesis of which we speak began in Europe by the so-called *Vienna Circle*. Admittedly, the roots and factual basis go back much farther.

Moritz Schlick along with his students and colleagues around 1923 began anew to answer the question: Under what conditions can statements be said to be true (or false)? With the aid of recent mathematico-logical works of such men as G. Boole, G. Frege, E. V. Huntington, G. Peano, B. Russell, etc., coupled with the success of the laboratory method of the 19th and 20th centuries, these men began to construct a new answer to this question—an answer which, when fully developed, consists in uniting formal logic with experimentation or fact-finding. This is a union of rationalism and empiricism. This movement is characteristically antimetaphysical. It is, negatively, a rebellion against the traditional belief, whether in the physical or social sciences, that there are *things in themselves* which can be talked about and "known" through reason, but cannot be known by way of the senses. E.g., all essences, such as "inner character of man," "the nature of man," "the economic man," "justice" in the abstract,

<sup>2</sup> "Notwithstanding the admittedly practical necessity for most scientists to concentrate their efforts in special fields of research, science is, according to its aim of enlarging human understanding, essentially a unity." Niels Bohr, *International Encyclopedia of Unified Science*, Vol. 1, No. 1, p. 28. "Accordingly, the great need is for those who are actuated by the scientific spirit to take counsel regarding the place and function of science in the total scene of life." John Dewey, *ibid.*, p. 33. "Ideas that descend from the prescientific epoch are still with us and are crystallized in institutions." John Dewey, *ibid.*, p. 35. "The instrument of mathematical logic, which has begun to be appreciated during the present century, possesses two rather different kinds of utility—one in pure mathematics, the other in various empirical sciences." Bertrand Russell, *ibid.*, p. 39. "The question of the unity of science is meant here as a problem of the logic of science, not of ontology. We do not ask: 'Is the world one?'" Charles W. Morris, *ibid.*, p. 63.

physical "causes" and "forces," etc. Positively, logical empiricists are pretty well agreed that all meaningful statements can in principle be shown to be true or false by experience. To ask: What is the nature of that which is the cause of experience, but which itself cannot (consequently) be experienced? is a meaningless question according to logical empiricism, for *ipso facto* an answer to it cannot be given in experiential terms. Similarly, to say that an evil will is the cause of crime, or that greed is the cause of suffering, or that unemployment is the cause of depressions, or that a low atmospheric pressure is the cause of incoming air currents, are meaningless statements. These statements have good grammatical form, but do not have good scientific form.<sup>3</sup> Scientific statements must be such that their truth makes a difference in experience—a difference that can be observed by the senses.

Of course, logically there are two (or possibly three) kinds of sentences (propositions). (1) Formal sentences, including all pure mathematical statements, such as " $2+2=4$ ," all systems of measurement, and all definitions. These sentences are prescriptions in that they are furnished by the mind. (2) Factual sentences, such as "the horse weighs 1,000 pounds." Such statements can be known to be true or false only by experience, and can never be so known through pure reason. (3) Non-sense statements, such as "the square is round."<sup>4</sup> The implications for the natural and social sciences of this distinction in kinds of sentences is far reaching. The proper interpretation of formal statements leads to significant testable factual statements. In this way *a priori* (analytic) statements,

<sup>3</sup> All factual statements must have possible experimental referents.

<sup>4</sup> Out of this movement three facets of science have been clarified through the language approach. *Pragmatics*: a study of the function of language in its biological, sociological, and psychological setting. *Semantics*: a study of sentences in relation to their designata; i.e., factual referents. *Syntactics*: a study of the formal structure of sentences and language systems, involving also rules of formation and transformations of sentences. The sentence "all A's are B's" may be transformed into "no A's are non B's." Formation concerns grammatical structure.



when interpreted, give rise to a *posteriori* (synthetic) statements.<sup>5</sup>

In America Charles Peirce was probably the most representative of the attitudes expressed in the unity of science movement, for he was a logician of the new order (somewhat anti-Aristotelian) and had a "laboratory type of mind." C. I. Lewis is probably next in line, for, although quite conscious of the significance of experimentation or the laboratory technique, he was never willing to forsake *a priori* truths. Thus he gave both sense experience and formal systems (or *a priori* knowledge) each its proper place in scientific methodology.<sup>6</sup> Actually, however, Bertrand Russell will probably go down in history as the father of this movement despite his disapproval of many parts of logical positivism. (He is a realist by faith, and is, therefore, opposed to the positivism of such men as Mach, Poincare, and Karl Pearson, all of whom serve as a stimulus to the movement). Russell, influenced by such logicians as Leibniz, Boole, Frege, and Peano, did more than any other person to disseminate an interest in a new logic (somewhat anti-Aristotelian — at least showing the inadequacy of Aristotelian logic) far better adapted to experimentation than classical logic. He made a clear distinction between formal statements (analytic)

<sup>5</sup> One interprets a formal statement by adding the spatio-temporal characteristic to it. E.g., "a lake is an inland body of water" is formal. But to say "this (spatial) is (temporal) a lake" is a factual statement testable by experience. *Analytic* sentences consist in a restatement of what has been said (or strictly implied). E.g., "a square has four equal sides." "Four equal sides" is simply analyzed out of the concept "square," for that is what "square" means, in part at least. Synthetic sentences relate two (or more) logically unrelated concepts by the spatio-temporal factors. E.g., "this chicken eats corn." Obviously the chicken referred to does not have to eat corn to be a chicken. The two concepts, "this chicken" and "eats corn," are synthesized. But a square *must* have four equal sides to be a square. All factual statements are synthetic. There is no necessity in them being true. Only experience can tell us whether they are true or false. All formal statements are analytic.

<sup>6</sup> The pragmatic movement in America was carried on especially by James, Dewey, J. H. Tufts, A. W. Moore, G. H. Mead, C. I. Lewis, C. W. Morris, Donald Piatt, etc. Certainly this movement does not need purging as it becomes integrated with the larger unity of science movement. What pragmatism lacked most was logical rigor. In many other respects pragmatism is far ahead of the unity of science movement as a whole, but it was, I believe, inadequate.

and material statements (synthetic or factual).<sup>7</sup> This distinction was a major stimulus to such men as Wittgenstein, who in turn stimulated directly the Vienna Circle.

The widely known American philosopher, Charles W. Morris, became interested in the Vienna Circle about 1930. He visited several of the logical positivists in 1933-1934, and I believe it was mostly through his influence that the First International Congress for the Unity of Science was held at the Sorbonne, Paris, in 1935. The Second Congress was held at Copenhagen, 1936; the Third at Paris, 1937; the Fourth at Cambridge, England, 1938; the Fifth at Harvard University, 1939; the Sixth at The University of Chicago, 1940. At these congresses famous scientists from almost all fields of science took part. For the most part they considered the methodology of science.

In addition to holding international congresses, this organization has begun the International Encyclopedia of Unified Science. The editor-in-chief is Otto Neurath; associate editors are Rudolf Carnap and Charles Morris. To date ten monographs have been issued.<sup>8</sup> The first two volumes of the Encyclopedia will consist of twenty such monographs. The main purpose can be briefly described.

The editors of the Encyclopedia believe that scientific activities depend on social institutions, or that science is essentially social in character. They want to unite in theory, and subsequently in practice, the better parts of scientific methodology wherever they may be found. Primarily they believe that science at its best results from a union of rationalism and empiricism. This synthesis

<sup>7</sup> Russell makes a distinction between knowledge by acquaintance (*erlebnis*) and knowledge by description or almost formal knowledge (*erkenntnis*). This is a distinction between the world we *suffer* and the world we *think*.

<sup>8</sup> The following items have been issued to date (October, 1945): (1) *Encyclopedia and Unified Science*—Neurath, Bohr, Dewey, Russell, Carnap, Morris. (2) *Foundations of the Theory of Signs*—Charles Morris. (3) *Foundations of Logic and Mathematics*—Rudolf Carnap. (4) *Linguistic Aspects of Science*—Leonard Bloomfield. (5) *Procedures of Empirical Science*—Victor F. Lenzen. (6) *Principles of the Theory of Probability*—Ernest Nagel. (7) *Foundations of the Social Sciences*—Otto Neurath. (8) *Theory of Valuation*—John Dewey. (9) *The Technique of Theory Construction*—Joseph H. Woodger. (10) *The Development of Rationalism and Empiricism*—George de Santillana and Edgar Zilsel.

which they hope to achieve is at once a rebellion against scholasticism and against branches of deformed scholasticism, such as Hegelianism and more recent realisms. The unity of science, however, is not to be effected through metaphysical, religious, or political doctrines. Nor is it to take place by reducing all sciences to one science, say physics. Rather the unity of which the editors speak will be achieved when there is effective inter-communication between all of the sciences. The assumption back of this is that scientific fields differ in orientation only and that no sharp divisions between them should exist. Communication between the sciences has broken down because we do not have a universal scientific jargon.<sup>9</sup> Communication can be re-established by logicalizing science; i.e., by making all scientific statements clear<sup>10</sup> in the sense that a test can be set up for their truth or falsity.

In modern times we find especially August Comte, the sociologist, and Herbert Spencer, the biological philosopher, each setting before himself the task of orienting all facts and all knowledge about a particular point of view. Comte subordinated all of the sciences to sociology. He committed the reductive fallacy. Similarly Spencer looked at all phenomena through Darwin's theory of biological evolution. Neither was successful in uniting the sciences in method because neither was ready to grant a rightful place to each of the sciences. And although the French Encyclopedists comprised a body of tolerating men from various fields, their work was more a collection of facts than a unity of science and a clarification of its method. The editors of the *Encyclopedia of Unified Science* hope to unite science not only in method but also by having the results of all of the sciences amenable to larger social problems, for after all science is a means of achieving social values.

Gottfried Leibniz (1646-1716) is in a sense the grandfather of logical empiricism. He entertained the hope (partly gratified

<sup>9</sup> "Universal Jargon; . . . has nothing to do with any kind of international language; even of the various international languages, such as Esperanto, Ido, Basic, Interglossa, we may regard one section as the Universal Jargon of the respective international language." Otto Neurath; *International Encyclopedia of Unified Science*, Vol. II, No. 1, p. 6.

<sup>10</sup> In 1878 Charles Peirce wrote an article in the *Popular Science Monthly* called "How to Make Our Ideas Clear." It dealt with this problem in a way very similar to that of logical empiricists.

through his excellent logical works — being also a co-inventor of calculus with Newton) of developing a universal algebra which would be the instrument of perfect inter-communication between scientists. But Leibniz was a rationalist, and his work was mainly an attempt to secularize logic or to see perfect (pre-established) logical forms in all phenomena. To be consistent he could not admit that either using our senses to acquire information or the mundane business of fact-finding is altogether worthy of a first class scientist. Briefly, he hoped to unravel the factual secrets of the world through the application of a fore-ordained logical system. He would have reason legislate over the world of fact. British empiricists such as Locke, Berkeley, Hume, J. S. Mill, etc., went to the opposite extreme and tried to show that our logical systems (including algebra, geometry, systems of weights and measurement, etc.) were arrived at by way of sense experience. They would have facts legislate over reason. And although it might be the case that one cannot think reflectively without both sense experience and formal systems so that in fact they are not completely separated, men, through abstraction and for the purpose of emphasis or neglect, can make a most effective distinction between the two. The improvement of our sensitivities to relevant data observed by way of refined scientific instruments such as the spectroscope and microscope, can take place independent of many formal systems otherwise relevant. Similarly the development of formal logics can take place independent of a knowledge of how (if ever) they may be interpreted and applied. But in actual complete scientific practice both formal systems and sense data are coordinated. The *Encyclopedia of Unified Science* hopes to show how this is done, first in theory, then in practice.

Although the unity of science movement has as its basis a philosophic theory of the nature of knowledge and of the knowing process and was motivated largely through extra-laboratory interests, it has gradually become more and more to consist in the compilation of scientific knowledge. Any one who is to contribute to this movement must, in addition to having a great deal of data at his disposal, be explicitly conscious of the ideological framework (scientific theory) by which he interprets that data. Men in all



fields of science may participate in the movement directly by making solid scientific contributions. It is hoped that scientists in every quarter will be helpfully affected by the movement.<sup>11</sup>

<sup>11</sup> For further reading on the history of the movement see especially: "Impressions and Appraisals of Analytical Philosophy in Europe," by E. Nagel, *Journal of Philosophy*, 1936; "Logistic Empiricism," by Hans Reichenbach, *ibid.*; "Logical Positivism," by Blumberg and Feigl, *Journal of Philosophy*, 1931; "Logical Empiricism," by Herbert Feigl, in *Twentieth Century Philosophy*, Edited by D. D. Runes, 1943; *Le développement du Cercle de Vienne de l'empirisme logique*, par Otto Neurath, Paris, Hermann & Cie., 1935.

## Constitutional Amendments: Kentucky

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At the November 6 election Kentucky adopted two amendments to the state Constitution. One of these partially removed a restriction on voting which had effectively prevented the participation in state or local elections of any person away from home. The amendment authorizes the legislature to provide for absentee voting.

The second amendment goes in precisely the opposite direction and inserts a legislative restriction in the Constitution. It requires that revenues from motor vehicle license and excise taxes, automobile operator license fees, and motor fuel excises shall be irrevocably dedicated to road purposes. Although there has never been a serious suggestion of using Kentucky motor vehicle registration, motor transportation (bus and truck), or gasoline tax revenues for any purpose other than highways, a small proportion has in the past been distributed to counties for local roads.

Quite aside from long-run considerations, there will be certain interesting immediate effects of this legislation. (1) About \$2.75 million will be immediately removed from the General to the Road Fund—and incidentally from the purview of effective budgeting. The bulk of the estimated revenue to be shifted is the proceeds of the so-called motor usage tax, a general revenue measure which was imposed in much the same form and in much the same manner as the tax on alcoholic beverage and cigarette consumption. (2) All the important revenue measures which exhibit marked stability of yield will be permanently earmarked for roads, and the support of education, welfare, and general government will be left with small-scale revenue measures which can be depended on and several important revenue sources which exhibit distinct sensitiveness to business conditions. (3) The airplane users (except for interstate common carriers, in the instance of which a refund is granted) will be called on to pay into the state treasury gasoline tax revenues which cannot constitutionally be used in any degree for building airports or for

any other purpose directly connected with aviation. (4) It seems that the amendment may deny the counties the grant which has thus far been made them from the truck licenses. The total amount of this grant is small, but in the poor counties it is substantially the only money which is available or which under the constitution can be made available for highway support. (5) There is disagreement as to whether local gasoline and motor registration taxes will be precluded.

Although both amendments were approved by solid majorities, newspaper reports reveal that the road amendment, unlike the one giving soldiers and sailors the right to suffrage, passed by substantially unanimous votes in the precincts ordinarily associated with election irregularities.

## Book Reviews

Basch, Antonín, *A Price for Peace*. (New York, Columbia University Press, 1945, pp. xii, 199, \$2.50.)

This is a timely, and ably presented little book by a foreign trade expert on what he regards as the foremost task of the post-war period — "fitting the Continent of Europe into the new structure of world economy." The price which the nations of the world must pay for peace is the "reduction of all kinds of trade barriers and a firm establishment of the principle of trading equality."

Professor Basch generalizes the program of the United Nations to a common denominator of four objectives: (1) to raise the standard of living, (2) to provide for a high level of employment, (3) to introduce a comprehensive system of social security, (4) to speed up the development of retarded regions. For the achievement of these objectives, he has one simple and oft-repeated formula — multilateral trade, subject, in the long run, only to the principle of comparative cost.

To this task of formulating a way for the nations of the world to live together in prosperity and security, the author brings a wealth of information about the contemporary economic world, about all of the recent major developments, prospects, and proposals in all the economically dynamic parts of the world into which he proposes to fit continental Europe. He finds a feverish industrialization going on in Latin America and in the British family of nations, placing India as the eighth nation of the world in volume of industrial production. The obvious significance of all this development is that not only the Continent but Great Britain must readjust foreign trade patterns drastically — with an ultimate view to comparative costs.

Reasoning from Professor Basch's distinguished career as industrialist and banker in Czechoslovakia during the inter-war period, the reader expects that the best part of the book may well be a survey of the natural and industrial resources available for reconstruction and new industrialization. A mere inventory indicating the scale, variety, and concentration of such resources would be helpful to the reader. The only analysis of this region of the author's pivotal concern is a postulation of the Continent of Europe as embracing all the region between the English Channel and the Russian border, and a subdivision of this vast country into an advanced industrial West and a depressed agricultural East. A few of the mineral resources of the latter area are



recounted in a very few lines. Chapters on "Continental Europe's Position in World Trade" and "European Economy in the Inter-war Period" fail to provide any such empirical framework, the one being devoted to over-all percentage indexes of export and import and the other to the institutional steps leading up to fascism. By way of deviating from his thesis, the author suggests that Western Europe yield to the principle of comparative costs to the extent of buying its grain from the Danubian countries — but not to the extent of buying it from Canada and Argentina. One helpfully down-to-earth touch is the description of the agriculture of eastern Europe as having too many men and too few tools, suggesting that the proposed sale of grain to western Europe may never be feasible under the principle of comparative cost.

The United States is cast for the heroic role in this proposed drama of international trade. The funds of the U. N. R. R. A. are characterized as wholly inadequate for the rehabilitation of Europe. The International Monetary Fund proposed at the Bretton Woods Conference is, of course, basic to the concept of stabilized currencies for international trade. The Bank proposed by the same Conference fits into the author's proposal for the rehabilitation of Europe, but its resources are characterized as far from adequate. The book proposes a net capital outflow of approximately four billions per year for twenty years as the most constructive contribution possible for the United States. This country would have to learn to absorb consumer goods from its worldwide network of debtors. To accomplish this theoretical end, Professor Basch proposes a greatly enlarged scope of foreign trade for this country. By 1950 exports would reach the unprecedented level of ten billions, imports, six billions.

In spite of his conventional liberalism and the theoretical oversimplification implicit in a unilinear solution for so complex a problem, Professor Basch can hardly be classed with the trio of apocryphal voices which have so lately and so forcefully issued out of central Europe to warn Anglo-Saxons of the dire consequences of all innovations in social control. His attitude is more flexible, more tolerant than are those of von Mises and von Hayek, untouched with the pessimism of Schumpeter. He is prepared to accept a degree of nationalization of industry in eastern Europe, but is inclined to deprecate mere nationalization as probably political rather than economic. He is far less tolerant of government intervention than of government ownership and operation. He predicts an important role in world economy for the Soviet Union, particularly if the policy of autarky is abandoned in favor

of mutual cooperation through international trade. He scouts the notion that Russia is likely to become a serious competitor of industrial nations for world markets in the immediate post-war, pointing out that her annual interwar foreign trade volume was approximately equal to that of Czechoslovakia.

The author considers the problem of Germany to be a very delicate one, interwoven with the whole of European economy. He demands reparations in kind, breaking up of the big trusts and combinations into integrated technological units, and the removal of the synthetic nitrogen industry. Rather than destroy the metallurgical industry, he seems disposed to have its productivity channeled to reparations.

University of Texas

EASTIN NELSON

Krout, John Allen, and Fox, Dixon Ryan, *The Completion of Independence: 1790-1830*. (New York, N.Y.: The Macmillan Company, 1944, pp. xxiii, 487.)

The publication of *The Completion of Independence, 1790 to 1830* fills in the last gap of the "A History of American Life." Dixon R. Fox, co-author of this volume and joint editor of the twelve volumes comprising the series, lived to see all these volumes come from the press. But he died unexpectedly in January, 1945. Professor A. M. Schlesinger, co-editor with D. R. Fox, was president of the American Historical Association in 1942. It should be noted that Professor Carl Becker, who was consulting editor, died in May, 1945. So it is obvious that this series was in the hands of men of very high competence.

Those who projected this series — not the men mentioned above — intended that politics and military history should be ruthlessly pruned away — too much attention had been given to these aspects by earlier historians and too little to the cultural, social, literary, artistic, religious, professional, and technical interest of the people. So in a sense this series could be called a historical forerunner to the dawning "Century of the Common Man."

In all cooperative works, such as this one, where many authors contribute their parts there will be unevenness of quality — of style, lack of integration, and faulty interpretation. Perhaps this last volume should be one of the best, and it is, for criticisms of the other volumes have appeared in all the great quarterlies, and these have helped. Yet, Professor Krout and President Fox are unexcelled as historical delineators of this period. Every page testifies to their worth: their interpretation, thoroughness of investigation, graceful style, and polished wit. Annotated and

classified bibliographies are one of the outstanding features of this series. This work has twenty-five illustrations taken from contemporary sources.

Every chapter contains a rich harvest of useful information. The student of immigration will like chapter I, the "Atlantic Ports." The political scientists might enjoy reading the chapters on the "Republican Aristocrats," the "Challenge of Liberal Thought," and the "New Sectional Tensions." Of interest to economists are the chapters on the "Business Scene," the "Turn-pike Era," and the "Day of the Merchant."

Now, of course, the critic will have his say. He wonders why politics should be omitted. For the American people have democratized politics as much as any other aspect of American life.

There are some who might question attributing economic determinism as a motivating factor in the War of 1812. Pratt's thesis — *The Expansionists of 1812* — could better have been balanced by citing Hildreth who was a Federalist and a contemporary of that war. It is true that Hildreth wrote about a century ago. Although a Federalist, he justified the war. Why not use him since other contemporary sources have been used. The Southern planters fought England in the War of 1812 for the same reason they fought her in the Revolutionary War. "They put honor above profit, and fought for national dignity," a recent writer asserts. This same writer explains New England's failure to cooperate with the West and the South on the grounds that she was evenly divided between those who lived by commercial capitalism and those who profited from the rising industrial capitalism. Because of tradition and prestige the commercial elements remained in control, palsying the hand of the Federal Government. Nor was Henry Clay really concerned about taking Canada, he spoke for Nationalism and the unification of the country. The alleged desire for annexation of Canada was merely a threatening club held over the head of England. The commercial men of New England knew that England's blockade would utterly crush them and they also knew that their losses to England on the high seas were relatively small as compared to the great gains realized from the ocean traffic. The commercial groups lost out after the war and the Federalist party whose forces were linked with the commercial men went into the discard with them. It was the new industrial capitalism which compelled New England to take a nationalistic stand, and New England exerted a growing influence in national affairs.

The central thread of this work shows a painfully conscious striving of the American people for independence from Europe in all things cultural.

University of Oklahoma

RALPH H. RECORDS

Reichenbach, Hans, *Philosophic Foundations of Quantum Mechanics*. (Berkeley and Los Angeles: University of California Press. 1944. vi, 182 pp. \$3.00)

As a whole this book contributes to a clarification of methodology in both the social and the physical sciences. It is in three parts. Part I gives a short history of quantum theory and an explanation of why quantum mechanics leads to "casual anomalies," i.e., to circumstances under which certain factors in a situation are not only unpredicted but unpredictable. Consequently quantum mechanics has given rise to Heisenberg's Principle of Indeterminacy. Classical mechanics was based on the assumption that all mechanical data of a particle (of mass or matter) at a given time was acquirable, if not acquired. That, for example, if one would take the trouble, both the position and the momentum of a particle could be known. Heisenberg states that this is impossible *in principle*. As Reichenbach explains, this means that certain unobservable phenomena, although presumed to exist despite lack of observability, are at present unintelligible, for classical mechanics is unable in practice and in fact (though not in principle) to acquire scientific information of the unobserved and quantum mechanics denies that such information is possible.

It is at this point that Reichenbach makes a worthy distinction in kind between events; the more worthy because it can be generalized and applied to other than sub-atomic change. This is the distinction between *phenomena* (observable events, detected by the senses directly for the most part) and *interphenomena* (events spatially or temporally between phenomena). Considering Reichenbach somewhat of a positivist, this distinction opens a gate through which *metaphysical* elements may enter, for one cannot both be a positivist and entertain notions about things *unobservable in principle*. (Things in themselves?) Be the metaphysical implications as they may, this distinction is made with the implicit assumption that observable events, although spatially or temporally separated, may be *related through interphenomena* and, if so, they are intelligibly related. I.e. without interphenomena, phenomena are unintelligible and irrational. No laws could be set up. No prediction would be possible, etc. And, although Reichenbach "finds" that quantum mechanics is inconsistent with classical casual theory (it denies that there are causes), he nevertheless



insists (by emphasizing the reality of interphenomena) on what to many of us is the core of the casual principle; namely, observable events are connected by an inter chain of events, thereby making them intelligible. What he has shown is that the principle of indeterminacy denies that the entire future of events is predictable, and if, as Laplace contended, to be caused is to be predictable, then quantum mechanics denies the casual principle.

Part II is a mathematical development of quantum mechanics, not especially readable to the layman and not essential to an appreciation of Parts I and III.

Part III, consisting of interpretations, is a development of a new three-valued logic (true, false, and *indeterminate*). In traditional logic only "true" and "false" are applicable to statements and, according to the excluded middle principle, every statement is true or false (not both) in an absolute sense. Although such men as E. L. Post, J. Lucasiewicz and A. Tarski have developed multivalued systems of logic, based on the assumption that statements are at best only highly probably true or false and that there are, therefore, degrees of probability, Reichenbach's three-valued logic is developed from a different point of view. First, with him all statements about phenomena (observable events) are still probable, and "indeterminate" must, then, apply in a different sense than it does with earlier more-than-two-valued systems. "Indeterminate" applies only to *interphenomena*. Secondly, Reichenbach develops his logic with the fore knowledge of how it is to be interpreted (applied to quantum mechanics.) The exact meaning of "indeterminate" in his system is not made clear, but if the application of it to interphenomena holds, this will be a marked contribution. I take it that Reichenbach believes this to be the main contribution of his book.

The University of Texas

DAVID L. MILLER

National Planning Association, *National Budgets for Full Employment*, Planning Pamphlets Nos. 43, 44, Washington, April, 1945, pp. viii, 96, 50¢.

Prepared by the NPA to urge the necessity of postwar planning and to discuss the fundamentals of such planning, and published under the same title because of unity of content, these two pamphlets constitute one of the interesting and important items of current "full employment" literature.

The evidence they offer as to the intellectual direction many able men, drawn from business, labor and government, are being

driven in an effort to solve the problem of "full employment" is one of the reasons social scientists will be interested in their contents. That direction is very clear from the reasoning and data throughout the pamphlets and it is explicitly indicated in the summation of "fundamentals" on the final page: "There cannot be full and continuing employment unless more people have the means to buy more of the produce of our collective brains and hands and savings."

These publications are important also because they document, without apparently intending to do so (in fact, disclaimers are inserted throughout the discussion), the issue before both the public and the planners, once the goal of full employment to be achieved through redistribution of incomes is accepted. That issue is whether we can depend on the prevailing economic ("business") organization to redistribute incomes effectively or whether we must use government action as the alternative.

Mr. Eric Johnston, as well as other able business leaders, have warned of these alternatives and have told business to do the job, or else. Despite the fact that many business men (perhaps a majority to judge from business comment and the actions of business organizations) see these alternatives clearly enough, and despite the fact that the authors reject the possibility that business, because the required volume of yearly investment would be entirely out of range of its capacities, could provide ample purchasing power, the authors adopt subterfuge toward government's power in this task.

It is the chief defect of the studies that they, after presenting with great clarity the facts that the authors think must determine economic policy, refuse to accept the government alternative and its implications in a democratic society. That the men who made the studies felt that they could not publicly present and defend the logic of their reasoning and facts, either because that logic ran counter to their own convictions, or because they feared public reaction if they went to bat, is enough to arouse fears as to our ability to deal effectively with the "full employment" problem.

For the authors did, in fact, accept the government alternative after rejecting any possibility that business could redistribute income satisfactorily. Having rejected the business "budget for full employment" and having pointed out that, though it would work, the public would be reluctant to accept the government "budget for full employment," the studies present as alternative a "standard of living budget." In it incomes are redistributed essentially as in the government budget, to give increased pur-

chasing power to low income recipients. However, this redistribution takes place on paper. No light is thrown on how we could establish a "standard of living budget" in our economy, without government action of the same character as would be required under the "government" budget. The authors did not establish an alternative, they dodged one, by this procedure.

If this is the best our planners have the courage to do, when they have fortified themselves with the data contained in such excellent statistical studies as we have in this case, business has nothing to fear from them. Nor do those who need full employment have much to gain.

University of Arkansas

R. B. MELTON

West, James (pseud.), *Plainville, U.S.A.*, (New York, Columbia University Press, 1945, pp. xv, 238, \$2.75).

In this book I have attempted to describe from the viewpoint of an anthropologist, but with a minimum of anthropological language, certain phases in the life of a small contemporary American rural community . . . The present study was undertaken to attempt to learn specifically and in detail how one relatively isolated and still "backward" American farming community reacts to the constant stream of traits and influences pouring into it from cities and from more "modern" farming communities. (p. vii)

The town studied is "Plainville," a community of 275 inhabitants, situated on the North-South Border of the Middle West.

By now sociologists and anthropologists have published a fair number of monographs on communities within our own society. The present book is superior to most, for it is a fresh study, giving a well rounded picture of the culture of the people.

The book is methodologically interesting because it shows that its author has given some attention to the problems with which thoughtful ethnographers are now struggling. I think it is safe to say that modern ethnographers have begun to reach a consensus on two points: (a) a culture consists of covert as well as overt behavior, and (b) the varying personalities of the participants, and differences in the situations which confront them, results in a wide range of behavior. But the implications of these propositions present practical difficulties.

In regard to the first point the question is, How are we to discover these covert customs? The obvious answer would seem to be, by simply asking the people. Yet what we know of the methodological problems involved in attitude research, let alone

our knowledge of the role of unconscious motivation, shows that the technique of direct questioning is often fruitless. A variety of techniques have been proposed by observers; the author tries to solve the problem by the extensive use of "native quotations and stereotypes" in order to give the participants' world view, and does so rather effectively, I think. But though a useful technique, it alone cannot solve the problem. After I had read the book I still did not feel that I knew enough about the culture of the participants to be able to look at the world from their point of view.

As to the second point, a technique is necessary which will give some idea of the specific situation, the personalities of the participants, and the degree to which these elements are average. Usually we are given a flat statement to the effect that "such-and-such is what the people say or do," though we know that no two people behave exactly alike, and that as the situations or personalities are varied, different kinds of behavior ensue. On the other extreme, we have material on nonconformists who strike the fancy of, or are most accessible to, the ethnographer, and the resulting account of the culture is necessarily distorted. Presumably because of space limitation, for his introduction speaks of life histories and other case material, statistics, etc., Mr. "West" tends toward the former approach, though he does give a little case material. At any rate, the reader is not shown a gallery of living people.

I suppose that in the last analysis, the solution of both problems is artistic as well as scientific. No scientist, no matter how painstaking, can capture the living reality of a group of people, without sensitivity, imagination, and the gift of expression. That is why I find Knud Rasmussen's Eskimo studies so moving, and why I feel that because of Balzac, Stendahl, and Proust, I have a better understanding of 19th century French culture than of any other.

Howard University

J. S. SLOTKIN

Embree, John F., *The Japanese Nation, a Social Survey*. (New York: Farrar and Rinehart, Inc., 1945, pp. xii, 308, \$3.00.)

This book is a product of the trend toward broad areal studies produced by the special requirements for the training of civil affairs personnel during the war. It has both the good qualities and some of the drawbacks that might be expected in an attempt to present a groundwork of custom, etiquette, folklore and traditional history to facilitate direct contact with a people together with a brief account of their political, social and economic



organization. Inevitably questions will arise as to the selection and omission of material and almost inevitably some aspects will be superficially presented.

There are a number of inaccuracies or superficialities in economic and political matters. Of a technical nature is the confusion in discussing the decree powers of the emperor (p. 62) where it is stated, misquoting Article IX of the Japanese Constitution, that "no *Imperial* Ordinance shall in any way alter any of the existing laws." The word "imperial" has been inserted through a failure to distinguish the ordinances having temporarily the full force of law under Article VIII and the ordinances subordinate to law under Article IX. Actually two other decree powers are vested in the Emperor: permanent legislation on certain subjects by Articles X, XI and XII and emergency budgetary ordinances by Article LXX.

National peculiarities, salient enough in the etiquette of personal relations and in family or religious matters, are unduly emphasized in the politico-economic sphere. That in the fascistic measures of Japanese ruling groups there was a good deal of deliberate copying of European models is not shown. The "native" character of Japanese political movements is exaggerated. As a matter of fact Japanese history of the Tokugawa and succeeding periods has at an accelerated rate notably paralleled that of Western Europe in the feudal period and the period of feudalistic autocracies which followed feudalism proper.

The political stability of the Japanese rural social structure is implied (p. 52) although data as to indebtedness and rent levels presented just before (p. 51) hardly justify such a conclusion. The paternalistic measures described (p. 121) as directed at inculcating "peacefulness" in the rural population also point to a tension which is nowhere stated to exist. The land question would seem to have sufficient potential importance to justify more explicit analysis. Similarly, a fuller explanation of militarist "anti-capitalism" would have been desirable. A reader could easily equate the romantic feudalistic distaste for a trading economy with working-class socialism.

As a general introduction to Japanese culture this is a valuable book. The inclusion of a full chapter on the Tokugawa period as the background of modern developments is especially commendable. Family and educational influences on the formation of Japanese character are well presented. The explanation of the Japanese religious system is much more complete and adequate than anything heretofore conveniently available.

University of Texas

G. LOWELL FIELD